



3 1761 11849817 9



59

ROYAL COMMISSION OF INQUIRY INTO CERTAIN
DEATHS AT THE HOSPITAL FOR SICK CHILDREN AND
RELATED MATTERS.

Hearing held
8th floor
180 Dundas Street West
Toronto, Ontario

The Honourable Mr. Justice S.G.M. Grange
P.S.A. Lamek, Q.C.
E.A. Cronk
Thomas Millar

Commissioner
Counsel
Associate Counsel
Administrator

Transcript of evidence
for
November 1, 1983

VOLUME 59

OFFICIAL COURT REPORTERS

Angus, Stonehouse & Co. Ltd.,
14 Carlton Street, 7th Floor,
Toronto, Ontario M5B 1J2

595-1065

Phillips
X Hunt
Knaxen
Olak
Labow
Tobias
Shanahan
Roland
Reid EAC
Zukawon
In de EAC
X Roland
Foster
Hunt
McIntyre
Knaxen
Labow
Shanahan



Digitized by the Internet Archive
in 2023 with funding from
University of Toronto

<https://archive.org/details/31761118498179>



ROYAL COMMISSION OF INQUIRY INTO CERTAIN
DEATHS AT THE HOSPITAL FOR SICK CHILDREN
AND RELATED MATTERS.

Hearing held on the 8th Floor,
180 Dundas Street West, Toronto,
Ontario, on Tuesday, the 1st day
of November, 1983.

- - - - -

THE HONOURABLE MR. JUSTICE S.G.M. GRANGE - Commissioner
THOMAS MILLAR - Administrator
MURRAY R. ELLIOT - Registrar

- - - - -

APPEARANCES:

E. CRONK	Commission Counsel
D. HUNT	Counsel for the Attorney General and Solicitor General of Ontario (Crown Attorneys and Coroner's Office)
I.J. ROLAND) M. THOMSON) R. BATTH)	Counsel for The Hospital for Sick Children
D. YOUNG	Counsel for The Metropolitan Toronto Police
K. CHOWN	Counsel for numerous Doctors at The Hospital for Sick Children
E. MCINTYRE	Counsel for the Registered Nurses' Association of Ontario and 35 Registered Nurses at The Hospital for Sick Children

(Cont'd)



APPEARANCES: (Continued)

D. BROWN	Counsel for Susan Nelles - Nurse
G.R. STRATHY) E. FORSTER)	Counsel for Phyllis Trayner - Nurse
J. A. OLAH	Counsel for Janet Brownless - R.N.A.
B. KNAZAN	Counsel for Mrs. M. Christie - R.N.A.
S. LABOW	Counsel for Mr. & Mrs. Gosselin, Mr. & Mrs. Gionas, Mr. & Mrs. Inwood, Mr. & Mrs. Turner, and Mr. & Mrs. Lutes (parents of deceased children)
F.J. SHANAHAN	Counsel for Mr. & Mrs. Dominic Lombardo (parents of deceased child Stephanie Lombardo); and Heather Dawson (mother of deceased child Amber Dawson)
W.W. TOBIAS	Counsel for Mr. & Mrs. Hines (parents of deceased child Jordan Hines)
J. SHINEHOFT	Counsel for Lorie Pacsai and Kevin Garnet (parents of deceased child Kevin Pacsai)



INDEX OF WITNESSES

<u>NAME</u>	<u>Page No.</u>
<u>PHILLIPS, (Dr.) James; Resumed</u>	3092
Cross-Examination by Mr. Hunt	3097
Cross-Examination by Mr. Knazan	3104
Cross-Examination by Mr. Olah	3109
Cross-Examination by Mr. Labow	3133
Cross-Examination by Mr. Tobias	3137
Cross-Examination by Mr. Shinehoft	3162
Re-Examination by Mr. Roland	3171
Re-Direct Examination by Ms. Cronk	3177
Further Re-Direct Examination by Ms. Cronk	3198

<u>IZUKAWA, (Dr.) Teruo; Sworn</u>	3199
Direct Examination by Ms. Cronk	3199
Examination by Mr. Roland	3263
Cross-Examination by Ms. Forster	3265
Cross-Examination by Mr. Hunt	3267
Cross-Examination by Ms. McIntyre	3270
Cross-Examination by Mr. Knazan	3275
Cross-Examination by Mr. Labow	3278
Cross-Examination by Mr. Shanahan	3299

INDEX OF EXHIBITS

<u>No.</u>	<u>DESCRIPTION</u>	<u>PAGE NO.</u>
243	Publication entitled "Pathology of Drug Induced and Toxic Diseases" by Robert Riddell.	3182
244	Curriculum vitae, Dr. Teuro Izukawa.	3201
43B	Page 19A of Arrest Note.	3204



1

2

/DM/ak

3

---Upon commencing at 10:00 a.m.

4

DR. JAMES PHILLIPS, Resumed

5

THE COMMISSIONER: Yes, Mr. Roland?

6

7

8

9

10

MR. ROLAND: I have, Mr. Commissioner,
a couple of exhibits to introduce, but it is not
something that you eat. The other day in
Dr. Spielberg's evidence there was a question about
the administration of gentamicin, I think with
respect to Baby Hines and there was a request for
some vials of gentamicin.

11

12

13

14

15

We now have two vials of gentamicin
to put in as exhibits. One is a 2 millilitre vial
of 80 milligrams of gentamicin, and it has a red
top; and the other is a 2 millilitre vial of 20
milligrams of gentamicin and it has a blue top.

16

17

18

THE COMMISSIONER: Do we have any
room, Mr. Registrar, in the other one? They are
going to be filed as part of Exhibit 225. Yes,
Mr. Olah?

19

20

21

MR. OLAH: Mr. Commissioner, you
will recall last night you suggested we try to
agree upon a date for submissions.

22

23

24

25

THE COMMISSIONER: That is right
and I intended to bring that up. Yes, what has
happened? You can't reach him?



1

2

MR. BROWN: No, I can't reach him.

3

THE COMMISSIONER: Is he still on

4

the payroll?

5

MR. BROWN: One wonders.

6

THE COMMISSIONER: One wonders why?

7

MR. BROWN: He is known as the
phantom. You suggested next Thursday afternoon?

8

THE COMMISSIONER: Yes.

9

MR. BROWN: I suggest perhaps that
day be fixed and Mr. Sopinka then has to work around
that date.

12

THE COMMISSIONER: That is a very
drastic proposal.

13

14

MR. BROWN: It is brash but I am
willing to take the consequences.

15

16

THE COMMISSIONER: Yes, all right.
What do you say to that, Mr. Young?

17

18

MR. YOUNG: We have a bit of a
problem with next Thursday afternoon, but nothing
that can't be overcome.

19

20

THE COMMISSIONER: All right.

21

22

MR. YOUNG: Mr. Percival has a
meeting that he has to attend at 2 o'clock, he
expects he will be finished by 3:30, and if Mr. Olah's
argument could precede ours I expect we will be able

23

24

25



1
2 to have all the arguments next Thursday.

3 THE COMMISSIONER: Yes, all right.

4 MR. OLAH: I am content with that,
5 Mr. Commissioner. As you know, I am anxious to get
6 the matter before you and to get a ruling so we
7 know from our perspective where we are going. So
8 I would be most grateful if we could proceed next
9 Thursday and all parties be present and available.

10 THE COMMISSIONER: How is that for
11 you?

12 MS. CRONK: That is fine, sir.

13 THE COMMISSIONER: We will make it,
14 the argument then commencing at 2:30 on Thursday the
15 10th of November, 1983.

16 MR. OLAH: Thank you,
17 Mr. Commissioner.

18 THE COMMISSIONER: All right then.
19 I think the other matter that I have asked for
20 written argument on, to date I received one, that is
21 not from a counsel, that is from a member of the
22 audience, so I guess - well, we will see, the day
23 is not over yet.

24 MR. YOUNG: Mr. Commissioner, we
25 have our argument ready and I can file it with you
now if you like.



1

2

THE COMMISSIONER: Oh, all right.

3

4

MR. YOUNG: I didn't know if you
were requesting them now.

5

6

THE COMMISSIONER: No, I thought I
would just mention it. Thank you.

7

8

MS. CRONK: We have been provided
as well with a copy on behalf of Mrs. Christie.

9

10

11

12

THE COMMISSIONER: Oh, all right.
What I had planned to do of course was distribute
all of these to everybody and I suppose everybody
is entitled to have them and I will make a copy -
yes, Mr. Shinehoft?

13

14

15

16

MR. SHINEHOFT: Just to inform you,
Mr. Commissioner, that parents have prepared
submissions, one submission on behalf of all four
counsel and it will be provided when Mr. Tobias
arrives here.

17

18

19

THE COMMISSIONER: Oh, all right,
thank you. Just a word is all I need. Yes,
Mr. Knazan?

20

21

22

MR. KNAZAN: My argument is being
distributed this morning, I wonder if I could make
a 60-second statement?

23

24

25

THE COMMISSIONER: Yes, all right.

MR. KNAZAN: With respect to it.



1
2 If it is out of order I'm sure someone will point
3 it out.

4 Some counsel at the beginning made
5 what really amounted to an opening, telling you the
6 position of their clients towards the Commission.
7 I just want to state with respect to this written
8 submission that we have vigorously, and we hope
9 persuasively, supported the position that you cannot
10 name names. Mrs. Christie's position is that she
11 intends to testify; she is meeting with the
12 Commissioners, investigators; she has always
13 co-operated with and been treated well by the
14 police and she is only interested in the truth on
15 4A and 4B where she had worked for many years. The
16 only reason she is taking this position is that you
17 asked for our comments on what the words meant and
18 what the law is and we have provided it.

19 THE COMMISSIONER: Thank you.
20 That's fine. I guess, Mr. Hunt. I probably won't
21 do anything about these until everyone has had a
22 chance to reply. You will appreciate I might look
23 at them but I certainly will not make any decision
24 until that has happened.

25 MR. HUNT: Our submissions will
be filed later today if that is all right, they are



1
2 being typed, Mr. Commissioner.

3 THE COMMISSIONER: Yes, all right.

4 CROSS-EXAMINATION BY MR. HUNT:

5 Q. Doctor, if I can go first to
6 Exhibit 231 which is your chart covering the
7 12 cases where there was no record of digoxin
8 administration on the patients' chart.

9 Firstly, you noted that you yourself
10 suspected that some of these children may have been
11 administered digoxin at some point prior to arriving
12 at the Sick Children's Hospital, is that correct?

13 A. That was my initial interpreta-
14 tion as to the - probably the explanation.

15 Q. Was that because of the
16 severe nature of the heart disease that each child
17 had?

18 A. Yes.

19 Q. And the levels that are
20 recorded on Exhibit 231, they seem relatively
21 small, would they be reflective of perhaps
22 administration of the maximum of one therapeutic
23 dose of digoxin?

24 A. These are all in the therapeutic
25 range I think and I thought was consistent with the
administration of digoxin for therapeutic purposes.



1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Q. Now, these levels were arrived at by the lab at Sick Children's Hospital, is that correct?

A. Yes.

Q. The one which is No. 10, where the Centre of Forensic Sciences was also asked to do an analysis, they reflected a negative level while the lab at Sick Children's Hospital reflected a level of 1.4 nanograms.

A. Yes.

Q. Do you know what testing procedure the lab at the Hospital was using?

A. I would have to check that specifically to see what time they actually changed over to the new method, I think it was the RIA method but I am not certain I would have to check it.

Q. We have heard some evidence here from Mr. Cimbura to the effect that the method he was using involved an RIA procedure and an HPLC procedure, then another RIA procedure, and the suggestion was that perhaps that combination of the various procedures removed digoxinlike substances from the material being analyzed, and if that was the case would that account in your view for the difference between the two levels that was recorded?



1
2
3 A. Yes, that is correct. In fact
4 most of the values that we had checked at the
5 Forensic Sciences Centre were lower.

6 THE COMMISSIONER: Yes, Mr. Olah?

7 MR. OLAH: Excuse me,
8 Mr. Commissioner, I am not sure how this pathologist
9 would be qualified to testify with respect to RIA
10 and readings. He may be able to speculate, but that
11 is not his area of expertise with great respect.

12 THE COMMISSIONER: I think the main
13 point of the examination is the system that was being
14 used. We have had all kinds of experts already on
15 that and we have been pretty lax about people
16 discussing matters outside their own expertise.

17 MR. OLAH: I know, Mr. Commissioner.
18 But my friend was trying to get this witness to
19 explain why there may be a difference in the readings,
20 that certainly is the expertise, in our respectful
21 submission of a chemist, biochemist.

22 THE COMMISSIONER: I agree with
23 what you have to say.

24 MR. OLAH: Thank you.

25 THE COMMISSIONER: I would like to
know, if the witness can tell us, what system was
being used by the Hospital at that time?



1

2

3

MR. HUNT: Well, I think
Dr. Phillips said he wasn't quite sure and he
would have to check.

5

THE COMMISSIONER: He thinks it
was the RIA method.

6

7

MR. HUNT: We haven't heard any
evidence to the effect they were using the same
combination of RIA and HPLC that Mr. Cimbura was.
I think the Doctor has fairly given his opinion
within the bounds of his own expertise with respect
to the difference in those two readings.

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25



B
DP/cr

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Q. Now sir, in your evidence yesterday you indicated that with respect to notifying the Coroner's Office of levels that you found in postmortem cases, that the level of 5 was selected. In other words, if it was above 5 nanograms you notified the coroner. If it was below, you did not. Do I take it that that is an arbitrary figure that was arrived at as between you and Dr. Tepperman, a figure that you were both comfortable with in terms of notification?

A. Yes, to the best of my recollection it was after a discussion of that type that this was the figure that was decided upon.

Q. There is no magic to that figure, it is just one that was selected as between the two of you?

A. Yes.

Q. Finally, this study, this research that you have done into postmortem digoxin levels, is that really under your guidance?

A. Which study?

Q. The one where you looked at 608 cases in the last two years?

A. No, we did this - this was initiated by the Coroner's Office right after



1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

the events in March when meetings were held about the deaths on the ward. In fact, when I came back on March 30 it was already routine policy then to do this.

Q. Since then, has it been yourself and perhaps Mr. Cimbura from the Centre who have been most directly involved with it?

A. I had been mostly involved in it, most of the tests were done in the Hospital, as a matter of fact.

Q. The Centre was only involved when there was some need for a comparative analysis?

A. Yes, when some of the values looked high or if there was extra serum that you wanted to get double checked, aside from that one study involving the gutter blood that we talked about.

Q. Would it be fair to categorize this study into postmortem digoxin data involving now, I suppose, over 608 samples as perhaps the most extensive one every conducted anywhere into digoxin?

A. I think so, yes.

Q. There is no study that you are aware of anywhere in the world that has that large a sample to work from. Is that fair?



3

1

2

A. That is correct.

3

Q. That being the case, you

4

said yesterday that the levels such as the level

5

in Justin Cook and perhaps some of the others such

6

as Inwood and Pacsai, with the exception of the

7

Gary Murphy case, have never been repeated in the
study?

8

A. That is right.

9

Q. So that the events,

10

whatever the combination of events were that led

11

to what happened in March of 1981, and I am referring

12

to the consecutive deaths at the levels that were

13

reported in Inwood and Hines and Pacsai and Miller

14

and Cook, that has never repeated itself in the course

15

of these 600 or 700-odd cases that have been examined?

16

A. That is correct.

17

Q. I suggest, sir, that

18

if the events that gave rise to what happened in

19

March of 1981 had been a natural medical phenomena

20

would we not have expected to see some sign of that

21

in the course of the research that has been done?

22

A. I think so, that by now

we probably would be expecting to have found some

23

elevated values in those ranges.

24

Q. And the fact that we have

25



1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

not seen a repeat of the factors, the combination of factors that gave rise to the events of March as this study has progressed and progresses, I take it makes it less likely that the events of March of 1981 were simply a natural medical phenomena?

A. I think that is correct.

MR. HUNT: Thank you. Those are all the questions I have.

THE COMMISSIONER: Mr. Young.

MR. YOUNG: I have no questions, Mr. Commissioner.

THE COMMISSIONER: Thank you. Miss McIntyre.

MS. MCINTYRE: I have no questions, Mr. Commissioner.

THE COMMISSIONER: Mr. Knazan.

CROSS-EXAMINATION BY MR. KNAZAN:

Q. Referring you to Exhibit 232, Dr. Phillips, yesterday in your testimony you gave a list of those who had been shown to have renal problems?

A. Yes.

Q. Who made that list? Who undertook the investigation which resulted in that list?



1

5

2

A. I looked in the charts at

3

the blood urea nitrogen and creatinine levels.

4

Q. Would it be fair to say

5

that that was undertaken to attempt to explain some

6

of these high postmortem levels?

7

A. Yes.

8

Q. And to give them, if I

9

can put it, an innocent explanation. Would that
be correct?

10

A. Yes - well, medical

11

explanation.

12

Q. Medical explanation.

13

A. Yes.

14

Q. I notice that about six of

15

these took place on 4A and 4B, rough count, and about
11 or 12 on 7G. I don't think you have to recount

16

them, I may be one or two out.

17

To your knowledge did anyone do a

18

study to see which staff at the Hospital was on at

19

the time these deaths occurred?

20

A. No, I do not believe so.

21

I certainly have not.

22

Q. And you did not hear any

23

talk of anybody else doing such a study?

24

A. No.

25



6

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Q. Either with respect to all
of the babies or the babies on certain wards?

A. Not with respect to any
of them.

Q. And as far as you are aware,
has anyone undertaken to make sure that the nursing
schedules for the times of these deaths have been
preserved, so such a study could be undertaken?

A. I really have no specific
information about that - no knowledge of that.

Q. Thank you. You referred in
your testimony in chief to anatomical causes of
death. That is what you can see either grossly or
in the microscope?

A. Yes.

Q. Now, the next few questions,
when I use the word poison, I mean both substances
which are always lethal, or drugs which are given in
such a dose that they become lethal, I mean in both
senses.

Is it true that some poisons are
observable anatomically, in the sense you defined that
yesterday?

A. The poisons may not be but
the effects of them might be. You can't see chemicals



1

2

in the microscope.

3

4

Q. But other poisons such
as arsonic, isn't it true that some of the classic
poisons leave actual physical traces in the body?

5

6

A. By chemical procedures,
yes.

7

8

Q. So a pathologist observing
it could never detect it?

9

10

11

12

A. Well there are quite a
number of agents which will produce changes in various
tissues and organs which we can recognize, if that is
what you are asking.

13

14

Q. Yes, it is. So that would
be an anatomical observation of a poison?

15

16

17

A. Yes.
Q. Is it also true that some
poisons leave an odour that the pathologists can
determine?

18

19

20

21

22

23

24

25

- - - -



BmB.jc
C

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Q And is it also true that some
poisons affect the colour of some of the organs?

A Yes.

Q For instance, some poisons turn
the liver yellow, as I understand?

A Yes.

Q Now, at the time of these events
in March of 1981 were you aware as to whether or not
digoxin in lethal doses left an anatomical trace in
the sense that I have just said?

A No, I knew that it didn't.

Q You knew that it didn't?

A My knowledge was that it didn't
produce any changes that you can see.

Q Okay. And was that a commonly
known fact?

A I think that's quite a well
known fact.

Q Among pathologists?

A Yes.

Q But would it be correct to say
that a person would either have to have a high level
of medical knowledge or do some pretty thorough
research to satisfy themselves that that would be the
case?



C.2

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

A. I suppose you would have to have a degree of training to know that.

MR. KNAZAN: Thank you.

THE COMMISSIONER: Mr. Olah?

MR. OLAH: Thank you, Mr. Commissioner.

CROSS-EXAMINATION BY MR. OLAH:

Q. From your evidence yesterday I understood that you were supervising the autopsy on the child Inwood?

A. Yes.

Q. And that in fact you were in the autopsy theatre or in the autopsy room when the autopsy took place?

A. Yes.

Q. Now, was there a preliminary memorandum of some kind prepared by Dr. Taylor with respect to this autopsy?

A. You mean a preliminary pathology report?

Q. Yes.

A. I would just have to check my notes and see that.

Q. Just to help you, Doctor, I don't have, or I don't believe we have seen a preliminary autopsy report in this case, but I may be wrong.



C.3

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

MS. CRONK: I was just about to anticipate you. I thought perhaps you were referring to something other than the autopsy report. It is at page 36 of the medical report.

MR. OLAH: I apologize.

Q. All right, have you got a copy of the preliminary autopsy report there, Doctor?

A. Yes. No, just a minute. No, I don't, I'm sorry.

Q. Well, there is no disagreement that in fact you did sign a preliminary autopsy report in this case or would you like to see it just to refresh your memory?

A. Yes, I would.

Q. All right. It is, as my friend indicated, it is Exhibit 113, Mr. Commissioner.

A. Do you know what page that is?

Q. Page 36.

A. Thank you.

Q. Now, you have seen the final autopsy report that was signed out by Dr. Cutz for you?

A. Yes.

Q. Or on your behalf?

A. Yes.

Q. And I take it you saw that



C.4

1

2

shortly after your return from your absence from the
Hospital?

3

4

A. Yes.

5

Q. And you reviewed the report at
that time?

6

7

A. Yes.

8

Q. And I assume you were in agree-
ment with the conclusion that was reached in the
report by Dr. Cutz, or conclusions?

9

10

A. Well, the list of anatomic
diagnosis would be the same.

11

12

Q. Yes.

13

A. The discussion that he wrote
and the discussion I wrote or would have written
perhaps might have been slightly different but it
essentially would have been very similar, I think.

14

15

16

Q. Did you write any sort of
discussion in a draft form before you left, Doctor?

17

18

A. No.

19

Q. No.

20

A. Not other than the preliminary.

21

Q. It is the second sentence that
I am most interested in:

22

"However, no clear cause is defined."

23

Do you see that there in the final

24

25



C.5

1

2

autopsy report, second last paragraph?

3

A. Yes.

4

Q. Were you in agreement with that assessment, Doctor?

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

A. Yes, I have heard of that.

22

23

24

Q. All right. Now, did you also become aware of the readings in the tissues of this particular child?

25



C.6

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

A. I have seen those at one time.

Q. Okay. And the coming to light of that additional evidence which was not available to you at the time the autopsy was carried out, did it alter or modify your assessment as to the cause of death of this child?

A. Well, certainly at the time we prepared these reports there was no question about that because, in addition to the heart failure in this baby, there was atelectasis of the lung, which was collapsed, some degree of collapse. There was also this amniotic squame problem, plus the pulmonary edema, all of which would contribute to difficulties with respiration in the face or on top of a congenital heart disease. Microscopically we found also myocardial necrosis. So that all of these findings collectively from a pathological viewpoint would to me at least be satisfactory to explain the death of this baby.

Q. I would like to take you back to the question I asked.

A. Yes.

Q. And that was the coming to light of this additional evidence, digoxin, and very significant levels of digoxin in the serum.



C.7

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

A. Yes.

Q. Did that alter or modify your conclusion as to the cause of death?

A. Well, as far as the tissue sample is concerned I feel in no way competent to discuss that because I just have no expertise in that. With respect to the serum level, the value of 491 I think that you quoted is extraordinarily high. I don't have any specific notes in front of me about that but I seem to remember that there was some discussion about that sample, that it had come from - it wasn't an ideal sample but I'm not certain of that.

Q. All right, Doctor, I take it that you are not qualified to decide whether or not such a sample is a true sample or an artefact, are you? That's not in the realm of your expertise?

A. Well, if I took a sample from the blood myself or my resident I would assume that it was satisfactory.

Q. All right. Now, assuming that that is a true reading.

A. Yes.

Q. Would that affect your opinion as to the cause of death of this child?

A. If that is a true reading then



C.8

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

that would have to be a very significant factor in the death, yes.

Q. All right. But that still doesn't answer or assist me in my question. Would that change your opinion as to what the cause of death of this child is?

A. Yes. I think any child can have sufficient clinical and anatomical causes to die but still have something else that actually produces death.

Q. The causing agent?

A. Yes.

Q. All right. So, do I take your opinion to be that assuming that that is a true reading, 491, that in fact it is your opinion today that the cause of that child's death is digoxin toxicity?

-

-



D/DM/ak

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

A. Well, I think if the reading is true I think that would be an overriding factor and override everything else, yes.

Q. When you say overriding factor, your opinion today, assuming that is a true reading, is that the cause of death of this child is digoxin toxicity?

A. Yes.

Q. Now, I would like to turn your attention to Exhibit 232, Doctor, have you got a copy of Exhibit 232 before you, that is a comparison of the 34 babies?

A. Yes.

Q. I did some quick calculations, Doctor, with respect to this chart, with respect to multipliers that you obtained, and by multipliers I mean comparison of antemortem digoxin readings as opposed to autopsy or postmortem digoxin readings.

A. Yes.

Q. Now, from the examination of Mr. Hunt this morning, am I clear in understanding that this is perhaps one of the most comprehensive studies carried out on this so-called multiplier formulation?

A. Yes. The term multiplier is



1

2

not one that I am really familiar with, but I think I know what you mean by it. There is a higher level post mortem than there is ante mortem.

3

4

5

Q. Yes, that is a comparison of postmortem and antemortem digoxin blood levels.

6

7

A. Yes.

8

9

Q. Did you at any time quantify the results you have got in terms of the number of multipliers of the kind of multipliers you obtained?

10

11

A. Did I, I am sorry ---

12

13

Q. Did you quantify the kind of multipliers that were obtained as a result of this study? Did you do a breakdown or an analysis?

14

A. I did, I looked at it briefly, yes.

15

16

17

18

19

Q. Because I suspect that you were as surprised as probably we are in terms of the high relationship which you got, that you obtained in many cases between postmortem and antemortem levels.

20

21

A. The high relationship post mortem, yes.

22

23

24

25

Q. Yes?

A. Yes.

Q. In fact in some 14 cases the



multiplier, if I may call it that, is in excess of 3.

A. Yes.

Q. And in each case there was no antemortem level so a multiplier could not be obtained.

A. Right.

Q. And in some 15 cases the so-called multiplier was under 3.

A. Well, I don't have that data in front of me to be able to confirm or not confirm that, but that sounds probably right.

Q. Did you do that kind of a statistical breakdown at all, Doctor?

A. No, I didn't do a statistical analysis, I made a listing, I made a listing of, for instance, if you look at these four where there are, 32, 33, 34 compare those values where there are three values, if you look at 32 it goes from 4.9 to 8.1, which is a doubling, approximate doubling.

Q. Yes, 2.57.

A. And then the postmortem one at autopsy is higher again. The one below that, No. 33, it goes up as well in a similar fashion, so that this sort of progressive rise in those three cases, No. 34 shows the same pattern, I think



D4

1

2

3

4

this is what you are referring to. This is a
noticeable finding that postmortem values are higher
an antemortem value.

5

6

7

Q. Let us for example, if we
turn to the first page, if we look at Case No. 7,
I see that the antemortem level is 1.4.

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

A. Yes.

Q. And the postmortem level is
8.5.

A. Yes.

Q. So you have a multiplier there
of something in the range of 6.1, certainly in
excess of 6.

A. Yes, I haven't calculated it
but it looks about right, yes.

Q. That is certainly much higher
than what so far has been reported in the literature,
isn't it; it is double the kind of multiplier or
almost triple some of the multipliers that had
been reported, is it not, Doctor?

A. Well, I wouldn't pretend to
be authoritative on all the literature, I have looked
at some of the literature and I think in general
your statement is probably right, but I cannot
specifically say that.



Phillips, cr.ex.
(Olah)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Q. Let us take the next case, Case No. 8, you have an antemortem reading of 1.4, and you have postmortem reading of 7.5, there you have a multiplier of in excess of 5, 5.36.

A. Yes.

Q. And if we drop down to Case 10, I think that was already covered with you, you have an antemortem level of 1.8 and a venous postmortem level of 11 for a multiplier of 6.11.

A. Yes.

Q. The next case down, Case 11, you have an antemortem level of 1.7, postmortem level of 9.5, a multiplier of 5.59.

A. Yes.

Q. So that this very comprehensive study that you carried out seems to suggest that in the range of multipliers that so far has been produced in literature ranges from 2.3, from 2 to 3 and may in fact be on the low side that you were getting multipliers of in excess of 6, certainly marginally in excess of 6.

A. Yes.

Q. Now one other area that I wanted to clarify with you if you could have a look at Exhibit 230, please, that is a summary of



1

2

postmortem blood digoxin data.

3

A. Yes, I have it.

4

Q. In the second paragraph, that

5

is the two star paragraphs.

6

A. Yes.

7

Q. About half way down the

8

paragraph you say:

9

"In one instance, A.110.83 an additional
blood sample was sent to Forensic
Sciences for analysis, the level
recorded by them was nil."

10

11

12

Do you know what the Hospital's

13

reading was in that case by any chance?

14

A. Just one moment, please.

15

THE COMMISSIONER: 1.4.

16

THE WITNESS: I think it is 1.4.

17

THE COMMISSIONER: On Exhibit 231,

the one you are talking about.

18

MR. OLAH: Thank you very much.

19

Q. The other matter that I was

20

interested in was the gutter blood study that you

21

carried out. I wasn't sure at the conclusion of

22

your evidence yesterday with respect to that area

23

as to what confidence level you feel ought to be

24

placed in a gutter blood reading, that is a reading

25



1
2 that is taken three hours after autopsy had commenced.

3 A. Well, there are two factors
4 here. One is the time which I think is probably
5 much less important than the site from which the
6 sample is taken. This is what I think is the most
7 important thing, ideally most medical information
8 that is available is done on blood samples and
9 probably the next most reliable is tissue samples.
10 There must be very few done on body fluids of this
11 kind which are not pure fluids but like an artificially
12 accumulated fluid which is really what this gutter
13 blood fluid is. I don't know of any studies that
14 have been done on that kind of material.

15 Q. I guess what we need from you,
16 Doctor, is assistance in terms of your expertise as
17 to the kind of confidence that we should place upon
18 a reading of that kind. Are you suggesting then
19 that in fact gutter blood samples should rank below
20 tissue samples in terms of the reliability, or is
21 it something that is more reliable than that?

22 A. Well, this particular type of
23 sample obtained from the pelvic gutter which is
24 potentially contaminated by material from the bowel,
25 no matter what measures you take to try and prevent
it it is always possible, because one has to cut



1
2 across the bowel. Even if you tie and this sort of
3 thing there is still the possibility of that happening.
4 I really think that is far from an ideal sample.

5 I must be quite fair and honest with
6 you about this, that when we got this value back we
7 thought it was significant, and it was only after we
8 did the study and sort of looked at it closer to see
9 exactly what kind of sample it was and the potential
10 for contamination of it that we sort of had more
concerns about it.

11 Q. Maybe let me express our
12 dilemma this way. Assume hypothetically you are
13 the pathologist on a child that has significant
14 anatomical defects upon autopsy. Assume that you
15 receive a level of say 72 nanograms from a gutter
16 blood sample. Given those two sets of facts what
17 conclusion would you in the hypothetical situation
reach as the pathologist for the cause of death?

18 A. Well, if you are asking me
19 what I think now, and what I thought in 1982 ---

20 Q. I am asking you what you
21 would say today given all of your information?

22 A. What I would say today is
23 I would have some significant doubt as to what that
24 level meant. It might be real, or it might be
25



1
2 measuring some contaminant, I couldn't be certain
3 any more.

4 Q. And then in reaching a conclu-
5 sion as to cause of death, would you then exclude
6 that reading or would you rely upon it?

7 A. I would probably have to -
8 I would include it in the discussion of it, but I
9 would probably have to leave it a little bit open
10 that I couldn't explain it completely one way or
11 the other, I think in all honesty, this is what I
would have to do.

12 Q. And in that hypothetical case
13 what would you list as the cause of death?

14 A. Well, in a lot of these cases
15 where there are so many abnormalities it is
16 actually hard to know exactly what the cause of
17 death is, there are multiple factors and they are
18 all probably contributing, and so it is not that
19 rare as you might think to be able to explain and
20 give a specific cause of death from a pathological
viewpoint, as it might seem.

21 Q. Assume you had the kind of
22 anatomical findings you did in the Estrella case
23 for purposes of our hypothetical. In that case
24 would you list congenital heart failure as a cause
25



1
2 of death, or would you reach digoxin toxicity as
3 the - would you list that as the cause of death?

4 A. Well, the Estrella baby was
5 one of the sickest babies in the series that is
6 being looked at. It had very severe heart disease,
7 very severe heart failure, and in addition to that
8 had, as I recall, a severe pneumonia and I think on
9 top of that we found microscopically there was
10 infarction in the heart, quite extensive necrosis,
or death of heart muscle tissue in that heart.

11 Q. Would you like to have the
12 chart to assist you, Doctor?

13 A. I have it here if you will
14 wait for a moment for me to refer to it.

15 Q. All right.

16 A. This is not a case that I
17 personally did myself.

18 Q. I understand that.
19
20
21 -----
22
23
24
25



DP.jc
E

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

A. You are referring to notes made by others, that congenital heart disease was of a severe form, congestive heart failure was severe bronchopneumonia was present bilaterally in the lungs. Those are the particular points that I just made, that is right.

Q. So let us go back to our hypothetical, bearing in mind these very severe pathological findings and your gutter blood rating, in that hypothetical, what would you posit as the cause of death?

A. Today?

Q. Today.

A. Well, I suppose it would depend on why I took the sample to start with. I would have to have some reason for taking it, and matters like that would have to enter into the consideration in a hypothetical discussion like this.

Q. All right then, let us posit one more factor to allay that concern, and that is you were requested by a cardiologist to take that sample.

A. I think today, faced with this value, I would have to at least give it some potential significance as being an important factor, that I



E.2

1

2

would have some question about it.

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Q. The problem I am having, Doctor,
is I am trying to - we lawyers tend to be a little
more simple minded than doctors and we work in terms
of probabilities. Is there anything more that you
can say that would assist us in that regard? Is it
probable, improbable, highly probable, highly improbable -
can you give us some sort of a range that would assist
us?

A. I do not think there is enough data
in the literature and experience to really know that.
We have this high value in this one patient and we
have one high value in that study that we did. As
far as I know those are the only two values in the
world, so you are really asking me to draw a fairly
definitive conclusion on really very thin data.

Q. If you cannot, we will just
leave it at that.

A. Well, I think I would have to
leave it that I would have some suspicion about it,
but I could not be certain.

Q. And what would that suspicion
level be? Would be a high level of suspicion or --

A. I would like to have a blood
level to confirm it with. I am still not sure I have



E.3

1

2

answered your question, but I tried.

3

4

5

Q. I would like to then just turn to the report that was prepared, I believe it was in July, 1982, you said?

6

A. Yes.

7

Q. That was - let me give you an exhibit number, Mr. Commissioner.

8

A. I have it.

9

10

11

12

13

Q. Exhibit 239, sir. As I understand it, this was a group effort whereby each pathologist reviewed the child that he had been responsible for, or the report he had been responsible for.

14

A. Yes.

15

16

Q. And then you sat down collectively and it was the consensus that was reached that was reported in this report?

17

18

A. Yes. It was probably weighted in what I thought the consensus was.

19

20

21

22

Q. I am sorry?

A. I say the report is probably weighted in that it states what my interpretation of the consensus was.

23

24

25

Q. This is your report, in other words? These are your words?



E.4

1

2

A. Yes.

3

4

5

Q. And it was a conclusion of the group with respect to Hines on page 3 that there was no specific anatomic cause of death?

6

A. Which case are we --

7

8

9

10

Q. This is Hines A68-81, the second one on page 3.

11

12

13

A. Yes, that is taking part of the sentence and I think you probably have to take the whole sentence.

14

15

16

Q. I will come to that but --
THE COMMISSIONER: Where is it on page 3 - I am sorry?

17

18

MR. OLAH: Page 3, it is the second child that is dealt with, Mr. Commissioner.

19

20

21

THE COMMISSIONER: I think it is on page 2, it must be - yes, page 2, I am sorry.

22

23

24

25

MR. OLAH: You may be missing a page, Mr. Commissioner.

THE COMMISSIONER: I am just trying to see what has happened here. Something has gone wrong.

--- Off record discussion

THE COMMISSIONER: I think this is important that we get it. I wonder if I could ask you



E.5

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

to look over these, as you are the author, and you can tell us whether that is the one. The exhibit has to be the correct one.

THE WITNESS: That is the correct one. The other one has something missing.

THE COMMISSIONER: Thank you. I wonder if we could substitute that one. Make that one Exhibit 239 and we will hide the other one somewhere.

All right now, Mr. Olah, would you go ahead. I think we have the right one now, and it is on page 3. I think everybody had better check it carefully. The pages are not numbered but they are 1, 2, 3, 4, 5, 6, 7 pages and several people may have got the wrong one just as we did, both the Registrar and I did. All right, go ahead then.

MR. OLAH: Thank you.

Q. You see that under Hines the first part of the sentence is:

"There was no specific anatomic cause of death ...".

A. I see that.

Q. I take that to mean, we will deal with the second part in a moment, that there was nothing in the microscope, looking down the microscope, that could be seen to explain the causation or the mechanism of death?



E.6

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

A. Yes.

Q. Now what you did see was that there were signs of what Dr. Becker has called missed-SIDS?

A. That is correct.

Q. And we have heard Dr. Becker's evidence, one of the explanations, or the explanation, that he reached was in fact SIDS as the cause of death?

A. Yes.

Q. Of course by July of 1982, as you point out in your report, digoxin was found in the tissues of Jordan Hines?

A. Yes.

Q. In your review in July of 1982 I take it that became a matter of serious concern to the group?

A. Yes.

Q. And the conclusion of the group as to the cause of death in Jordan Hines, was there a firm conclusion reached whether in July of 1982 it was SIDS or digoxin toxicity?

A. No, there was not. It was my interpretation at that meeting, from talking about the case with Dr. Becker, he was discussing it and he was convinced that this was a missed-SIDS and he gave his



E.7

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

discussion about it, and I thought his explanation sounded valid to me. So I think the general consensus was, it certainly was mine, that that is what it was.

Q. So as of July 1982 the conclusion was that it was SIDS but there was a concern with respect to possible digoxin role?

A. Yes. Now this puts a different complexion on it, the finding of digoxin when - I don't think this had come up before and certainly had not been tested for.

Q. By the way, in July of 1982, Doctor, was the group aware that Jordan Hines had never been prescribed digoxin?

A. I cannot honestly say if we knew that or not. I think - I can't speak to that.

Q. Would the knowledge of that fact today alter the conclusions reached in that paragraph at all?

A. The paragraph does not actually - it leaves things a little bit undecided, as I read it, and this is the way it is, or was at that time. We thought it was a missed-SIDS but if the patient had been given digoxin, dependent on what the level was, this could also be a significant factor in this case because there was great awareness by now in the



E.8

1

2

Hospital of problems with digoxin.

3

4

5

6

7

8

9

10

11

12

13

We discussed this to some extent,
as I recall, and would judge from what it says here,
and we had some difficulty in explaining - it might
explain the death but would not explain the previous
problems that the baby had had and there had been at
least one and I think two previous episodes of apnea
spells in this baby which brought the baby close to
death twice, or at least seriously ill twice before,
so the digoxin found at autopsy or subsequent to that
presumably would not have explained the initial
episodes which seemed similar to the final episode.
This is the way we were looking at it.

14

15

16

Q. So the bottom line or the final
conclusion of the group was that digoxin could have
been the cause of death in Hines, but there was no
way of ascertaining that?

17

18

19

A. Yes, I think that is right.

20

21

MR. OLAH: Thank you. I am grateful
for your help, Doctor.

22

23

24

25

THE COMMISSIONER: Thank you. Mr.
Labow?

CROSS-EXAMINATION BY MR. LABOW:

Q. Good morning, Doctor. My name
is Stephen Labow and we represent the parents of a



E.9

1

2

number of children, including Kristin Inwood.

3

4

Doctor, when you did your review in Exhibit 239, you, I take it, were the pathologist who reviewed the Inwood autopsy?

5

6

A. Well, Dr. Cutz and I would have done this collectively.

7

8

Q. So when you did the separate reviews before you got together as a group, each of you would have reviewed it?

9

10

11

A. Yes, but I would have known what he had said.

12

13

14

Q. Did you know in July of 1982 the additional factors that we have learned since then that Kristin Inwood had received a dose of digoxin not meant for her?

15

16

A. No, I did not know that at that time.

17

18

Q. You had not seen the patient incident report?

19

20

A. No.

21

22

Q. In July of 1982?

A. I had not seen it.

23

24

25

Q. Did you review the chart carefully?

A. Well, it would have been reviewed at the time that we did the case initially. The



E.10

1

2

resident who did that case would have reviewed the
chart and I would most likely have looked at it, too.
It is my usual practice to do so. I cannot remember
specifically.

5

6

Q Well, Dr. Taylor has told us
that when he reviewed the chart he did not know a
number of things that we have since learned.

8

A Right.

9

10

Q And my question is whether you
had learned any of them by July of 1982?

11

A No, I don't think in July of
1982 we knew that.

12

13

14

15

16

-

17

18

19

20

21

-

22

23

24

25



F
BB/cr

1

2

Those incident reports don't usually
go on the patient's chart I don't think.

4

Q. They are generally kept
where, do you know?

5

A. I am not certain where.

6

7

Q. But they are not kept
with the chart in the Hospital records room?

8

A. I don't think so.

9

10

Q. Now, we have heard in
depth that digoxin toxicity does not have what can
be termed specific symptoms. The symptoms of
digoxin intoxication are very non-specific?

11

12

13

A. Yes. Well, similar
to symptoms produced by other conditions, yes.

14

15

16

17

18

19

Q. So, would I be correct
in saying that if the clinicians involved in the
treatment of a child had either missed or ignored
symptoms that might be associated with digoxin
intoxication, then you as a pathologist would not
look into that?

20

A. Well, usually that would
be the case, yes.

21

22

23

24

25

Q. When you did your July,
1982 review, did you speak to any of the clinicians
to ask them if they had any additional information



1
2 in retrospect?

3 A. No, we looked at it from
4 just the pathology perspective only.

5 Q. So, you looked at it
6 solely to determine whether the Pathology Department
7 had acted correctly in any given case?

8 A. Yes.

9 Q. Now, regarding the cases,
10 the whole list of cases on page 1 of Exhibit 239.
11 I am referring to the ones that you didn't make any
12 specific remarks about?

13 A. Yes.

14 Q. Were your conclusions
15 essentially that the autopsy was fair based upon what
16 you knew of the case at the time?

17 A. Yes.

18 Q. But that is all that you
19 could conclude from that?

20 A. Yes.

21 MR. LABOW: I have no further
22 questions.

23 THE COMMISSIONER: All right, thank
24 you. Mr. Tobias?

25 CROSS-EXAMINATION BY MR. TOBIAS:

Q. Good morning, Dr. Phillips.



1
2 My name is Warren Tobias and I act for the family
3 of Jordan Hines. In your evidence yesterday you
4 indicated to the Commission that although you were
5 the author of the report, the report was the result
6 of joint discussions between yourself, Dr. Mancer,
7 Dr. Cutz and Dr. Becker, is that correct?

8 A. Yes.

9 Q. All right. Other than
10 you, did anyone actually contribute to the writing of
11 the report?

12 A. I may have given it to
13 Dr. Mancer to read and he may have edited it but I
14 am not sure, I just don't remember.

15 Q. All right. Well, let's
16 first deal with the initial draft. Was that totally
17 prepared by you or did any one of those other three
18 doctors write part of it?

19 A. No, I wrote it.

20 Q. Okay. And your recollection
21 is that you may have given it to Dr. Mancer. Did
22 you give it to anyone else but Dr. Mancer?

23 A. I don't remember.

24 Q. Do you have any knowledge
25 that either Dr. Becker or Dr. Cutz read this report?

A. I thought they had but I



4

1

2

can't remember now.

3

4

5

Q. All right. Is it fair to say that you can't be sure whether they read it but you think that they did. Is that a fair statement?

6

7

8

9

A. I think they did.

10

11

12

13

14

Q. All right, fine. And you can't recall whether there was any specific editing done by Dr. Mancer but you do recall that he did read it?

15

16

17

18

19

20

A. My memory about this is not great but I think that that is so.

21

22

23

24

25

Q. Well, is there any doubt in your mind that as the report stands today Dr. Mancer would agree with it?

A. I am not absolutely certain that I can speak for him about that now.

Q. All right. And is it your evidence today as far as you are aware, is there any doubt in your mind that the report as it stands today and as it has been entered as an exhibit that Dr. Cutz and Dr. Becker agree with it?

A. Well, I can't be certain of that either. It was my impression when I wrote it that this was sort of the general consensus of everybody.



1
2 Q. All right. You say the
3 report was ---

4 A. But I know they don't have
5 copies of this in their files because I went back
6 some considerable time later to ask them about it
7 So, their memories about it are fairly rusty and I
8 think I may not have circulated it.

9 Q. All right. Now, let me
10 understand you. Was the report prepared as of July
11 of 1982 or is that when the review was undertaken?

12 A. The review was a little
13 before that.

14 Q. So, would this report have
15 been completed some time in July of '82?

16 A. Yes.

17 Q. All right. Now, between
18 July of 1982 and today has Dr. Becker to your know-
19 ledge ever approached you and objected to any of the
20 language of this report or has he asked for any
21 amendments to the language?

22 A. No, we prepared this and
23 it just sat in the file and hasn't been changed or
24 modified.

25 Q. All right. Has anyone else,
and by that I mean either Dr. Cutz or Dr. Mancer, have



1

2

either of them approached you between July of '82

3

and today and asked for any changes to the report or

4

to its language?

5

A. No. But I am not exactly

6

sure that they know, as I said, the details of what

7

is in this report any more. I thought they knew but

8

I am not sure now that they did know.

9

Q. All right. Now, with respect

10

to your understanding of how this report came to be,

11

I would like to just review with you for a short

12

moment the methodology. I understood you yesterday

13

to say that you personally reviewed the slides in
all 29 of the cases.

14

A. Yes.

15

Q. Is that correct?

16

A. That is correct.

17

Q. And I also understood you

18

yesterday to indicate that you did not necessarily

19

review all 29 of the charts, the medical charts?

20

A. No, I didn't review those.

21

Q. All right. Now, at the

22

time, before the report was written, when the study

23

was just being undertaken, were there actual meetings

24

between yourself and the other three doctors wherein

25

these particular deaths and the causes of death were



1
2 discussed by the group?

3 A. Yes. What happened was,
4 I reviewed all the slides in these cases shortly after
5 March of '81 as a matter of fact, but I thought that
6 we should have a bit of a more formal review than
7 that done, particularly by the people who knew most
8 about the cases. So, I asked each of them to review
9 the pathology on the cases that were their main
concern.

10 Q. All right. Let me stop you
11 there just for one moment, Doctor, so that I don't
12 forget this question. What do you mean when you say
13 you asked them to review the pathology on their
14 cases. For instance, what would Dr. Becker have
reviewed on the Hines case?

15 A. I would think that he would
16 have read over his pathology report that he had
17 prepared and if he had any notes, I don't know if he
18 had any notes, the preliminary or the final report
19 and looked at the slides, this sort of thing.

20 Q. All right. Now, fine, if
21 you could continue on, you were telling me before
22 that you had reviewed the slides and you thought that
23 there would be a need for a little bit more formal
24 review, so, you asked each one of them to review
25



1

2

the pathology of their own individual cases?

3

A. Yes.

4

Q. I take it that was done.

5

Can you then tell me what the next part of the process was?

6

A. Well, we went down the list.

7

I asked - I can't remember which order now we did it

8

in but I asked, say, Dr. Mancer to review all his

9

cases and he would do that and I made a list, as I

10

recall, of the ones that were exactly the same and

11

then ones on which he wanted to make some comment and

12

comments seemed to be in order because of the nature of the case.

13

Q. Yes.

14

A. And we went through, each

15

of us did that and then at the end I used those notes to prepare this report.

16

17

Q. All right.

18

A. That is essentially what

19

happened.

20

Q. Now, one thing you haven't

21

told us is whether or not included in the process was

22

a face-to-face meeting between the four of you where

23

you discussed each case individually and talked about it as a group. Was that part of the methodology?

24

25



1

9

2

A. We did that to some extent

3

but it was felt that the person who had handled the
case knew most about it.

4

5

Q. Yes.

6

A. So that his input into it
was really the main input.

7

8

9

10

11

Q. All right. Are you telling
me then that basically the consensus that you have
been talking about in most cases would have been a
consensus reached largely on the basis of the
pathologist who actually reviewed the case originally?

12

A. Yes, that is true.

13

14

Q. His input would have been
the greatest component part of that consensus?

15

A. That's right.

16

17

18

19

20

Q. All right. Now, I would
like to ask you specifically about Hines because I
think it is pretty clear from the language of your
report that Hines and Pacsai were two of the cases
that presented you in authoring the report with the
greatest amount of difficulty. Would you agree with
that?

21

A. Yes.

22

23

Q. Okay. Now, with respect to
Hines, because of some of the difficulty you were

24

25



10

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

having with that case, do you recall if in respect of the review of his death there was a meeting between the four of you to discuss Dr. Becker's opinion with respect to the cause of death?

A. Well, there wasn't any special meeting. We had a meeting where I just described. In the case of the Hines baby he ...

Q. All right, I accept that there was no special meeting. Was there a meeting and was Hines discussed between the four of you?

A. Yes, that is what this document represents.

Q. Okay, fine. Now, with respect to this theory of Dr. Becker's, or I think I can state it more strongly than that, with respect to his opinion regarding the missed SIDS, do you recall whether there was any dissenting opinion by either yourself, Dr. Cutz or Dr. Mancer, did anyone disagree with him originally?

A. Not that I recall.

Q. All right. Now, you also indicated that you listed to Dr. Becker's explanation of the death?

A. Yes.

Q. And it was felt by you in



1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

any event, I believe your evidence to Mr. Olah was that it seemed valid?

A. Yes.

Q. All right. Do you recall specifically, was there a great deal of discussion about the Hines death and were the other doctors posing questions for Dr. Becker which would force him to explain his theories and expound on them?

A. I don't believe there was a great deal, no.

Q. All right. So, is it your evidence that basically the bottom line is that the opinion of Dr. Becker as explained to you in this meeting was accepted?

A. It was accepted by me certainly, yes.

Q. All right. Can I also take it that it was accepted by Dr. Cutz and Dr. Mancer since they have not asked you to change any of the conclusions that you stated in the report?

A. Well, I don't like to speak for them specifically in that way because I don't think that's quite correct because I really couldn't say that, but as I remember, there wasn't major dissent about it.



1

2

Q. As you remember there was
not major dissent?

3

4

A. Yes.

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Q. All right. Now, let's move
on. With respect to the question of dig. readings
in the Hines child, I believe you have indicated both
to Miss Cronk yesterday and to Mr. Olah this morning
that essentially the paragraph dealing with Hines in
your report is not definitive, it leaves things
rather undecided. Now, does that view as expressed
by you really stand for Dr. Becker's view today?

A. I think you would have to
ask Dr. Becker what he thinks. Everything connected
with the Hines, really what I am saying is second-hand
that I have heard from him.

Q. All right.

MR. ROLAND: Mr. Commissioner, we have
had Dr. Becker. Dr. Becker expressed his own view
and it is really not fair to be asking this witness
about Dr. Becker's view. Mr. Tobias asked Dr. Becker
about his own view extensively and he got lots of
opinions.

THE COMMISSIONER: Yes.

MR. TOBIAS: My difficulty, Mr.

Commissioner, that Mr. Roland I believe gave evidence
yesterday that really I had misunderstood this



1
2 report and that this report was Dr. Becker's view.
3 Now, I don't propose to cross-examine Mr. Roland and
4 I haven't had the opportunity to cross-examine Dr.
5 Becker on the specific report. So, I think I could
6 do nothing else but ask this witness whether it is his
7 understanding if this currently expresses Dr. Becker's
8 view. I think it is a fair question.

9 THE COMMISSIONER: That wasn't the
10 question though. You were asking whether what his
11 view was at that time, I think you weren't asking him
12 about his current view. But in any event, we have
13 had Dr. Becker, we have extensively had his current
14 views, so, we don't need that.

15 All right, carry on.

16 MR. TOBIAS: Perhaps if I can get
17 at it this way.

18 Q. Dr. Phillips, has Dr.
19 Becker ever at any time expressed to you the concern
20 that your report is not definitive enough, that is
21 too unequivocal?

22 THE COMMISSIONER: Too unequivocal
23 or equivocal, which do you mean?

24 MR. TOBIAS: I am sorry, Mr.
25 Commissioner?

THE COMMISSIONER: Do you mean



1

2

unequivocal or do you mean equivocal?

3

MR. TOBIAS: I am sorry, you are quite correct. Has he ever expressed to you - I am grateful, Mr. Commissioner - the view that the report is too equivocal?

6

A. I don't think Dr. Becker actually has recall of this report.

8

Q. I am sorry, you don't think Dr. Becker has read this report?

10

THE COMMISSIONER: Has recall.

11

THE WITNESS: Has recall of it.

12

MR. TOBIAS: Q. All right.

13

Could you explain that answer, I don't understand what you mean by Dr. Becker ---

14

A. Well, you are asking me what Dr. Becker thinks of this.

16

Q. No, sir, I am not asking you that.

17

A. I am sorry.

18

Q. I am asking you specifically whether he has ever approached you and indicated to you that he thought that your conclusions with respect to that paragraph were too equivocal?

21

22

A. Actually, what I wrote down there was largely my interpretation of what I thought he had said.

23

24

25



3/DM/ak

1

2

Q. Has he ever asked you to change
it?

3

4

A. No, he didn't in his report
after it was made.

5

6

Q. So as far as we know he is
satisfied with it.

7

8

MR. ROLAND: Then the witness said
earlier he didn't even know if Dr. Becker had seen
it, so it is hard to say Dr. Becker is satisfied
with it if he hasn't seen it.

10

11

12

13

14

15

16

MR. TOBIAS: Well, in fairness I
think the witness' evidence was that he had thought
that Dr. Becker had seen it and read it, but he
wasn't sure. Then as we moved on he became less
and less and less sure as to whether or not he has
read the report, I think that is a more accurate
summary of the evidence.

17

18

19

20

21

Q. In any event, I will put the
question to you again, with your permission,
Mr. Commissioner. As far as we know, on the basis
of what Dr. Becker has said to you he is satisfied
with it; do you agree with that?

22

23

24

25

A. No, that is assuming that he
has read it and all I can say is I thought he had
read it, but I am not absolutely sure he has read it.



1

2

3

Q. Do we have any evidence that
he has not satisfied with it?

4

A. No.

5

6

7

8

9

10

11

12

13

Q. All right, fine. Now you
indicated yesterday to Miss Cronk that in reference
to this specific question, I think you were asked
whether or not it was the consensus of the group
that the pathological indicators were consistent
with SIDS, and you started your answer by saying:
"It is very hard to speak for the group". Precisely
what did you mean by that, that it is very hard to
speak for the group? I understood that is precisely
what you are doing in this report.

14

15

16

17

A. Well, I think it was my intent
when I prepared this to be as objective as I could
and to draw up what I thought were the opinions
expressed at the meetings that we had.

18

19

20

21

22

23

For instance, in the case of Hines,
I prepared this report, I wrote the words that are
there. I must say my bias was to defer the opinion
to Dr. Becker since as far as I was concerned he is
the authority in our department on this subject.
I can't absolutely remember now other aspects of it
other than that, this is really the intent of it.

24

25

Q. Well, Doctor, to the extent



G3

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

that you have told us that you deferred to Dr. Becker, and surely there is nothing wrong with that, he was more familiar with the case, he is the foremost member of this group in terms of being an authority on SIDS.

A. Yes.

Q. To the extent that you and the others deferred to Dr. Becker, then you are speaking for the group with respect to the conclusions you have reached about Hines, isn't that correct?

A. I think so.

Q. Fine. Now, you also told Miss Cronk yesterday when you asked whether or not a history of arrhythmias consistent with SIDS, and I believe your words were:

"That is another complicating factor, it is not an easy question to resolve."

By that did you mean the factor of the presence of arrhythmias is what complicated the analysis, is that what you are referring to?

A. Yes, I think in ordinary SIDS, I don't think - I am not an authority on this subject, but I don't think arrhythmia is usual, but in missed-SIDS I think an arrhythmia is not so unusual, this is my interpretation, my understanding of it.



1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Q. I am sorry to interrupt,

Doctor. So what you are really saying is arrhythmia is a symptom that is not commonly associated with SIDS, but in Dr. Becker's view in this particular case given the missed-SIDS theory it was quite consistent with that diagnosis?

A. That is what I understood, yes.

Q. Is that fair?

A. Yes.

Q. And is that in fact why you felt that the question of arrhythmia was worthy in that paragraph of its own reference?

A. Yes.

Q. So that was clearly a factor that he wanted to bring out in this report and that is why specifically you put in the sentence: "The patient also had an arrhythmia".

A. Right.

Q. I am sorry?

A. Yes.

Q. Now, I believe in answering Mr. Olah's question this morning you were quite forthright when you said the bottom line on this issue with Hines is really that you can't say for sure



1

2

whether it was digoxin toxicity, or SIDS; am I
correctly summarizing what you have said?

4

A. Yes, in the context that up

5

until the time the digoxin factor was known it

6

seemed interpreted quite adequately to Dr. Becker, in

7

my understanding, as a case of missed-SIDS, and I

8

accepted that; when the digoxin factor came on the

9

scene we were not really fully able to explain it

10

what it was doing there, it could have been an

important factor or we just did not know.

11

Q. If I could just review with

12

you for a moment your thought process. Several

13

things are clear, and you would agree that at this

14

particular time in the very strict pathological

15

sense there is no anatomic cause of death for Hines?

16

A. No.

17

Q. And to make you more comfortable

18

I will add to that this following statement; that

19

in any event the death seems to be fully compatible

20

with SIDS, is that right, is that fair?

21

A. Yes, in the context with SIDS

22

this is what you find.

23

Q. All right, fine. And you also

24

say that death is possibly also compatible with

25

digoxin toxicity?



G6

1

2

A. Yes.

3

Q. And really what you are saying

4

is you can't definitely decide which is the cause

5

of death, isn't that really what you are saying?

6

A. Yes.

7

Q. Now, you indicated in your

8

report, and again in discussing the Hines child with

9

Mr. Olah this morning, that there was an instance,

10

and I quote your report in the particular paragraph

11

that we have been referring to on page 3, you use

12

the words:

13

"The patient had previous episodes of

14

apnea and nearly died (North York

15

Hospital)."

16

Can you tell me what was the source of that informa-
tion, how do you know the child nearly died at
North York General?

17

A. Well, this was, I think this

18

was the interpretation I obtained from Dr. Becker.

19

I have not actually reviewed this chart myself, but

20

this is what I understood that there had been a

21

serious, previous serious episodes.

22

Q. And you are dependent upon

23

that information or whatever it was, Dr. Becker told
you?

24

25



G7

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

A. Yes.

Q. You have no independent
recollection of any event yourself, do you?

A. No.

Q. And you haven't reviewed the
chart?

A. No, that is secondhand.

Q. So you really don't know what
happened in North York General?

A. No.

Q. Nor do you know what happened
at home?

A. No.

Q. Would it surprise you if I
told you that the one and only time that any
resuscitation efforts were necessary with respect
to Jordan Hines was on the date that he died at the
Hospital for Sick Children, March 8th, 1981?

A. You are asking me would I be
surprised?

Q. Yes.

A. Yes.

Q. Can you tell me why that would
surprise you?

A. Well, I think I had understood



G8

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

that this baby had had previous episodes of apnea spells requiring at least some physical action before the baby recovered from it.

Q. And that was the understanding that you had on the basis of your discussions with Dr. Becker?

A. Yes.

Q. Correct?

A. Yes.

Q. Now you say in your report that:

"It is not possible to exclude homicide in any of these cases from the pathology findings, nor is it possible to diagnose it."

Now you have said "any of these cases" so I take it you would include Hines in that statement?

A. Yes.

Q. You also say in your report ---
THE COMMISSIONER: Where are you reading from?

MR. TOBIAS: Under "Summary",
Mr. Commissioner.

THE COMMISSIONER: Yes.



G9

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

MR. TOBIAS: I believe at page 7,
the second paragraph from the top:

"It is not possible to exclude homicide
in any of these cases from the
pathology findings..."

Have you got it now, Mr. Commissioner?

THE COMMISSIONER: Yes. All right.

Thank you.

MR. TOBIAS: Q. You also say,
Doctor, in your report:

"There are basically two cases left
with obvious anatomic findings, Pacsai
and Hines."

And you go on to say:

"We now know we must suspect digoxin
toxicity in a number of these cases..."

And Mr. Commissioner, I am also referring there to
the "Summary", as a matter of fact the first paragraph
under the heading "Summary", the last sentence of
that paragraph.

Doctor, when you say:

"We now know we must suspect digoxin
toxicity in a number of these cases..."

I take it you would include the Hines case, is
that also correct?



G10

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

A. Yes, I think that is correct.

Q. Now lastly, Doctor, with respect to the apparent problem that you have in coming to a definitive conclusion with respect to the cause of death, with respect to Jordan Hines, and I know you are not an authority on SIDS and all of your answers will be qualified to that extent. Would you agree with me that basically Sudden Infant Death Syndrome is a diagnosis of exclusion.

A. Yes, it is.

Q. And you must in order to firmly establish that diagnosis exclude all other likely explanations for death?

A. Yes.

Q. Isn't the problem in this case really that on the basis of what we now know today, we can't really exclude digoxin intoxication because we simply don't have enough information about the levels, isn't that really what it comes down to?

A. I think that is true. There is an additional problem, however, in that would not explain everything, because the baby had problems prior to coming to the Hospital.

Q. Yes, but would you agree with me that the significance of those symptoms are largely



1

2

G11

3

related to the severity of those symptoms?

4

A. Could you repeat that please?

5

6

7

8

9

10

11

Q. I say, we appear to have a quandary; digoxin toxicity as you quite correctly point out would not necessarily explain the previous episodes of apnea, and the previous clinical course of what happened prior to coming to the Hospital. Isn't a very important factor in that consideration the severity of those symptoms, just how serious were the periods of apnea; what kind of care did the child require; what signs was he exhibiting?

12

A. Yes.

13

14

15

Q. Are not all of those factors, the severity of those that have to be taken into account?

16

A. I think so.

17

18

19

20

21

22

23

24

25

Q. Fine. Now again I will just put it to you that part of the problem is that because of the information we have about Hines, and that is, Doctor, and I will summarize it for you: he was not prescribed digoxin but they found digoxin in tissues which had been fixed at autopsy. We really don't know conclusively whether or not that digoxin in his tissue was there as a result of a fatal overdose, and because we can't answer that



G12

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

question we can't exclude the possibility and there-
fore cannot be absolutely sure about SIDS, is that
fair?

A. That is correct.

MR. TOBIAS: Fine. Thank you, Doctor.
Those are all my questions.

THE COMMISSIONER: We will take
20 minutes now.
---Short recess.



DP.jc
H

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

--- On resuming:

THE COMMISSIONER: Mr. Shanahan?

MR. SHANAHAN: Yes, your Honour, I have no questions of this witness. Due to my experience in Provincial court and criminal law background, I call everyone "your Honour" by reflex.

THE COMMISSIONER: Actually, it is upgrading me!

Yes, Mr. Shinehoft?

MR. SHINEHOFT: Thank you, Mr. Commissioner.

CROSS-EXAMINATION BY MR. SHINEHOFT:

Q Dr. Phillips, my name is Jack Shinehoft and I represent the parents of the baby Kevin Pacsai. I understand, Doctor, that you were not at the Hospital at the time of this baby's death. Is that correct? Is that the period in which you were away?

A. No, I think I was there. I went away on the 20th. This baby died on the 12th.

Q So you were there during the period in which he died, but you did not perform the autopsy, is that correct?

A. That is correct.

Q Our information is that it was



H.2

1

2

Dr. Cutz who performed the autopsy. Is that correct?

3

A. Yes, that is correct.

4

Q. And it was a coroner's case and

5

therefore he did the autopsy himself?

6

A. Yes.

7

Q. In response to my friend, Mr.

8

Tobias, questioning about the Hines baby, I believe you

9

said that everything that you said about Hines came

as secondhand information from Dr. Becker?

10

A. Yes.

11

Q. Could you say the same about

12

Dr. Cutz and Pacsai?

13

A. Yes.

14

Q. So really the conclusions that

15

Dr. Cutz has made in his report and the evidence that

16

he has given here, you do not have any evidence or

17

do not have any information that would quarrel or

disagree with the conclusions that he has come to?

18

A. Well, I must say I don't know

19

exactly what he has said to this Commission about this

20

but any information I have about this case I have

obtained from him.

21

Q. He has said, first of all, in

22

the coroner's report - have you seen that, Doctor?

23

A. Yes.

24

25



H.3

1

2

3

Q. That the cause of death I believe is digitalis toxicity?

4

A. Yes.

5

6

7

8

Q. And he has come here and he said basically, at page 568, line 7, if you want the reference, and I can read it exactly, but he said basically that if the levels hold true that he felt that this baby died of digoxin toxicity.

9

Would you agree with that, Doctor?

10

11

12

13

14

A. Well this was certainly true, and I believe I said this yesterday also, it was true at the time he made this report and at the time - in fact right up until the time of the Gary Murphy case.

15

16

17

Q. I am talking about the evidence that he came and gave to us within the last few weeks, and I will quote what he says. It is again at page 568, line 7:

18

19

20

21

22

"Q. And just in conclusion, Doctor, you feel that if that level can be supported - in other words, if there is nothing ... ",
The word the reporter has is "feloniously", I believe the word I used was "erroniously".

23

24

25

" ... wrong with that level, then you



H.4

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

"feel that the cause of this child's death is digitalis intoxication; is that correct?"

His answer was:

"Well, if the finding sticks - in other words, there is no longer an explanation as far as how he can get such a level under normal circumstances, then I think that would have to be the conclusion, yes."

Then, further, I asked him:

"And that was your conclusion at the time you prepared this report, and that conclusion is not changed today, has it?"

"A. Not so far, no."

Now, do you disagree with the conclusions that Dr. Cutz has arrived at initially and that he maintains at the time he gave his evidence here?

A. Well, you read a lot, and I think I agree with him on virtually all of it. My only problem is in the light of the new information, namely the Gary Murphy case, where there were high levels of this same magnitude or greater, with experts who



H.5

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

reviewed the case who thought that it was not death attributable to digitalis toxicity as I understand it, and this sort of casts some doubt, if you like, in my mind. I am less certain now about this case than I was before that.

Q. Surely, Doctor, Dr. Cutz was aware of the Gary Murphy case when he came here and gave his evidence within the last few weeks?

A. Well, that was his --

THE COMMISSIONER: Isn't there something though in what you read about - and there was not some other explanation?

MR. SHINEHOFT: That is right. Here he says basically I believe, well if the finding sticks, in other words there is no longer an explanation as far as he can get such a level under normal circumstances.

Q. So you are saying that you believe that that qualifier still applies?

A. Yes.

Q. There may be some difference but, speaking of the Gary Murphy case I believe in your evidence, Doctor, you categorize the Gary Murphy case as special and as well you categorize the Pacsai case as special. Is that correct?



H.6

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

A. At what time, in the hearings here?

Q. In the evidence that you have just given.

A. Yes.

Q. And I believe that you - the reason you categorize Pacsai as special, you said that the different - it was the link that was made with Estrella. Is that correct?

A. That was partly it, yes.

Q. And partly what else, Doctor?

A. Partly also I believe, this baby had a normal heart, or minor findings, pathologically.

Q. Right.

A. And there were two cases as I recall in particular in that category, and this was one.

Q. And you indicated that the Murphy child was unusual or special because of the high digoxin levels in his blood?

A. Yes.

Q. Even though these levels were not supposed to be there. Is that correct?

A. I can't explain why the levels were that high in the Murphy case. I don't have that expertise.



H.7

1

2

3

4

5

6

Q. My point, Doctor, is that when you refer to both of them as special or unusual, you mean it in a different context when you are referring to Murphy than when you are referring to Pacsai. Is that not correct?

7

A. Yes.

8

9

10

11

Q. Thank you, Doctor. I would like you to look, Doctor, at a couple of exhibits that have been introduced, Exhibit No. 232 and Exhibit No. 238. The one is the digoxin chart produced by the Hospital and the other is the chart produced by Mr. Cimbura.

12

13

14

I believe in evidence in chief you discussed them and my friend Mr. Roland had some questions about the various levels with you yesterday?

15

16

17

A. Yes.

Q. If you could refer specifically to Exhibit 238, the second page, do you have that, Doctor?

18

19

A. No, I think I know the one you are talking about.

20

21

22

Q. There is a letter to you, Dr. Phillips, from Mr. Cimbura dated January 31st, 1983 and then there is a second page attached to that letter.

23

A. Yes, just one moment - I have it.

24

25

Q. You have it?



H.8

1

2

A. Yes, I have it.

3

Q. You had indicated to Mr. Roland

4

in the examples that he gave to you of the comparison
between sagittal sinus blood samples and gutter blood

5

samples, that there was quite a discrepancy, quite

6

a multiplier in comparing the different values. Is

7

that correct, Doctor?

(2)

8

A. I cannot recall that. I know

9

we discussed multipliers in terms of antemortem and

10

postmortem blood samples and we may have discussed

11

blood versus gutter. I just cannot recall.

12

Q. I think that was just the latter

13

part of yesterday's evidence that you gave. I was

14

just wondering if you could compare the blood samples

for example in Case No. 1?

15

A. Yes.

16

Q. I believe it has a level of

17

4.8, and the gutter of 4.4?

18

A. Yes.

19

Q. Going through this, excluding

20

for the moment No. 5, would you say generally that

21

there is a fairly close relationship between the heart
blood and the gutter blood samples?

22

A. In this group, I think that is

23

so. There were some other ones that were on the other

24

25



H.9

1

2

sheet where there was a greater difference. In this sheet they are similar.

3

4

5

Q In this sheet here the variances, you would agree, Doctor, are considerably less than the variances on the Exhibit 232, would you not agree with me?

6

7

A. Yes.

8

9

Q Doctor, you, in the course of your profession, have performed many, many autopsies. Is that a fair statement?

10

11

12

A. Yes.

Q Would it be thousands that you have performed?

13

14

A. I have supervised a large number, probably of that order.

15

16

17

18

Q Let me ask you this, Doctor. Have you ever heard of a condition called transient adrenal insufficiency or another name called transient hypofunction of the adrenal cortex? Have you ever heard of that before?

19

20

A. I have heard of this in connection with the Pacsai case.

21

22

Q And where did you hear about this? How did this information come to you?

23

24

25

A. I heard of this from Dr. Bain.

Q Dr. Bain prepared a report and



H.10

1

2

did you have any input into that report?

3

A. No.

4

5

Q. Prior to reading that report
and speaking to Dr. Bain, had you ever heard of this
condition?

6

7

A. I may have heard of it but it
is not something that stands out in my mind.

8

9

Q. In the number of autopsies that
you either performed or supervised, have you ever
seen this condition?

10

11

A. No, I personally have no
experience with it.

12

13

MR. SHINEHOFT: Thank you very much,
Doctor. I have no further questions.

14

15

THE COMMISSIONER: Mr. Roland?

16

RE-EXAMINATION BY MR. ROLAND:

17

18

19

20

Q. Dr. Phillips, Mr. Olah took you
through the autopsy report in the Inwood case, that
is Exhibit No. 113, and in particular he asked you
about the second to last paragraph on page 21
which begins:

21

22

23

24

25

"Several factors may have contributed
to the death of this infant. However
no clear cause is defined."

You indicated to him that there appeared to be many



H.11

1

2

causes, possible causes for death determined at
autopsy.

3

4

5

6

7

Would you say with respect to that
sentence "However no clear cause is defined" to give
it the meaning, as I understand you tried to give it,
it should read "However no clear single cause is
defined."

8

9

10

Is that what you intended to convey?

A. That would be a much better
expression as far as I am concerned, yes.

11

12

13

14

15

Q. Because you told us as well,
as I heard your evidence concerning Baby Estrella,
that there were many cases of very sick babies, like
Baby Estrella, where it is not unusual at pathology
to be unable to select a single definitive cause
for death?

16

17

A. Yes, there are often multiple
factors.

18

19

Q. Is that what you were trying
to convey with respect to your view of Baby Inwood?

20

A. Yes.

21

22

23

24

25

Q. Now, with respect to the Hines'
infant, Mr. Tobias asked you if digital toxicity was
one of the things that you were particularly concerned
with in light of the knowledge you had subsequently



H.12

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

with respect to the administration or the finding
of digoxin in the tissues of Baby Hines, and he asked
you about the conclusion reached at autopsy as to the
cause of death. At page 29 of the autopsy report,
Dr. Becker sets out the four findings that he made
at autopsy that led him to the conclusion that it
was a SIDS or missed-SIDS case, and we have heard
those from Dr. Becker extensively, but the four that
he lists are persistent brown fat, extra medullary
hematopoiesis - I will leave that for the Reporter -
gliosis in the brain stem and a thickening of the
pulmonary arteries. I gather you would not be able
to conclude from those findings made at autopsy that
the baby died of dig. toxicity. None of those
findings, I gather, lead you to that conclusion, do they?



I/BB/ak

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

A. No, the dig. toxicity to my knowledge, there are no findings, so, it wouldn't explain those findings.

Q. And I gather as well then dig. toxicity does not explain those findings at autopsy?

A. That is correct.

Q. Yes. So, if you concluded, as I think Mr. Tobias invited you to, that Baby Hines died of dig. toxicity, it would leave unexplained those four pathological findings?

A. Yes.

THE COMMISSIONER: I'm sorry, I don't quite understand that. I thought those four pathological findings were findings of missed-SIDS.

MR. ROLAND: Yes.

THE COMMISSIONER: Not of SIDS.

MR. ROLAND: Well, yes, they are findings of missed-SIDS, you are quite right.

THE COMMISSIONER: So, if they are findings of missed-SIDS they could easily be accountable as for missed-SIDS findings and then of course if the baby died from a bullet wound in the head, the cause of death would be the bullet wound in the head; similarly, if he died from a -- well, perhaps I am wrong, Doctor. Of course, the digoxin readings



I.2

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

do not account for the apnea, the apnea was there, therefore, the child was susceptible to SIDS. But the child could have died either of SIDS or of digoxin poisoning, could he not?

THE WITNESS: Yes, that is correct.

THE COMMISSIONER: Have I missed something?

MR. ROLAND: No, it is just that I wanted to ask the question in the opposite way that Mr. Tobias did, that is, he focused on the reading of digoxin to try and lead the doctor to a conclusion ---

THE COMMISSIONER: But the SIDS doesn't account for the digoxin, the digoxin doesn't account for the missed-SIDS.

MR. ROLAND: Exactly. And those four findings at pathology that would lead to a missed-SIDS conclusion.

THE COMMISSIONER: And the digoxin would lead to a digoxin conclusion?

MR. ROLAND: Yes.

THE COMMISSIONER: Isn't that all that the Doctor has been saying?

MR. ROLAND: Yes.

THE WITNESS: Well, the missed-SIDS



I.3

1

2

is a combined clinical and pathological diagnosis.

3

THE COMMISSIONER: Yes, Mr. Olah.

4

MR. OLAH: Well, you will recall,

5

Mr. Commissioner, in fact I think it was Dr. Becker's

6

evidence that those observations or those pathological

7

symptoms probably would have occurred at least two

8

weeks prior to death.

9

THE COMMISSIONER: That's right.

10

Well, but it indicates that the baby was susceptible
to SIDS, that's all I am saying anyway.

11

MR. TOBIAS: Mr. Commissioner, I

12

don't think anything turns on it but just so there

13

is no confusion on the record, I believe that

14

Mr. Olah is right but only in part in that it is

15

the brain stem gliosis, that one of the four findings

16

that would take about two weeks to show up.

17

THE COMMISSIONER: Yes.

18

THE WITNESS: Yes.

19

MR. ROLAND: Q. Doctor, turning to

20

Exhibit 232. Mr. Olah took you through a number of

21

cases comparing the antemortem digoxin readings to

22

the digoxin readings at autopsy and, in particular,

23

he asked you about No. 7 and 8. Just so that we

24

are all not misled somewhat by at least some of these

25

examples, I notice with respect to both Case No. 7

26



I.4

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

and Case No. 8 there is a substantial period of time between the antemortem reading - let's take for instance Case No. 7, between the time of the antemortem reading and the time of death. In the case of No. 7 it is about something in the neighbourhood of four days, in Case No. 8 it is even longer, it is about 11 days. I take it then when you are comparing what we call the multiplier effect of an antemortem reading and postmortem reading you really need to take cases that are closer in time than 4 or 11 days, that you really should be looking at cases that are as close as possible but certainly to be a useful tool to try and determine a multiplier effect cases that are within a day or two at the most.

A. I think that is probably true, yes.

Q. Yes. Thank you. Those are all the questions I had.

THE COMMISSIONER: Miss Chown?

MS. CHOWN: No questions, thank you.

THE COMMISSIONER: Miss Cronk?

RE-DIRECT EXAMINATION BY MS. CRONK:

Q. Dr. Phillips, you will be pleased to hear that I have very few questions, as no doubt some others will be.



I.5

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Dr. Phillips, with respect to Exhibit 232, your computer printout involving those 37 cases, I had thought it was clear from the evidence that you gave yesterday but perhaps it wasn't. With respect to this printout I take it that it is clear that we cannot determine the age of the patients that are dealt with on that chart from the information that is set out on the printout itself?

A. That is correct.

Q. We don't know that.

A. Yes.

Q. And, Doctor, it has been suggested to you and I think quite properly this morning that in a number of cases a large number of those patients appear to have died on Ward 7G?

A. Yes.

Q. All right. And in that case I assume we can agree that it would be reasonable to assume that those patients were infants?

A. Yes.

Q. All right. In other cases, however, a large number of patients appear to have died in the ICU?

A. Yes.

Q. And I would suggest to you



I.6

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

that it would not be appropriate to make the same assumption in that regard, they may or may not be infants if they were in the ICU?

A. That is correct.

Q. All right. This list then of all of these patients, Doctor, may not be representative of a list of infant patients similar to the ones which in the majority this Commission is concerned with.

THE COMMISSIONER: Didn't we have some problem with infants before? Neonatal are up to 30 days, isn't that correct?

THE WITNESS: Yes, that is the first month.

THE COMMISSIONER: And infants are one year to two years.

MS. CRONK: A year to two years, depending on the evidence.

THE COMMISSIONER: Some say one, some say two years.

MS. CRONK: Yes.

THE COMMISSIONER: But Ward 7 is for the neonatals?

THE WITNESS: Yes.

THE COMMISSIONER: It is not for



I.7

infants?

THE WITNESS: That is correct.

MS. CRONK: I'm sorry, sir. So, the assumption we should make when we are talking about the patients around 7G are that those patients were neonates?

THE WITNESS: I think that is correct.

MS. CRONK: Q. But that the patients in the ICU might be neonates, they might not, and then again they might be toddlers and they might not, beyond the neonate stage?

A. Yes, the first part of that question I can't specifically answer because I actually don't know that but I think that is true what you just said.

Q. Thank you, Doctor. Doctor, with respect as well to another issue that has been raised again this morning and, that is, whether or not there are pathological indicators evident at autopsy where a patient has died from digitalis toxicity. You have told us this morning as I understand it that at the time of these events you knew on the basis of your familiarity with the literature and your own experience as a pathologist that there



1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

were no morphological signs or pathological indicators of digoxin intoxication. Do I have that correctly?

A. Yes, that is true. The only possible thing you could think of is that it might produce a cardiac arrest and then you might get an acute heart failure type of thing which is what the digoxin is given for. So, it would be absolutely masked and concealed and there is no way of detecting it. So, in effect, there is no specific way of identifying it.

Q. And, indeed, in a great number of cases that would, where the patients would arrive in the autopsy laboratory for autopsy, the final event or triggering event of death would in fact be a cardiac arrest I assume, in a great number of cases.

A. Yes.

Q. All right. Doctor, you have provided to me an extract from a book entitled "Pathology of Drug Induced and Toxic Diseases" by Robert Riddell with 28 Contributing Authors. I would ask you to look at that and identify it first as an extract from that book which lists on the attached page the pathology of certain drug induced and toxic diseases.



1

2

A. Yes.

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Q. All right. If we turn to page 24 which is attached we see a number of drugs listed in Table 2-2 and beside the name of the particular drug there is set out "A List of Selected Morphological Reactions in Infancy and Early Childhood". Do you see that?

A. Yes.

Q. And beside the drug digitalis there is an indication that there is no morphology which can be identified with respect to that drug.

A. Yes.

Q. Doctor, is this is a recent publication or is this a publication of longstanding?

A. No, it is 1982, it is a new book.

THE COMMISSIONER: 1982. What number are we at?

THE REGISTRAR: 243.

THE COMMISSIONER: 243.

---EXHIBIT NO. 243: Publication entitled "Pathology of Drug-Induced and Toxic Diseases" by Robert Riddell.

MS. CRONK: Q. Doctor, turning to another matter. Mr. Roland drew your attention just



1
2 a few moments ago to those several cases which
3 Mr. Olah raised with you set out on Exhibit 232,
4 your printout. You will recall - perhaps you should
5 have this in front of you, Doctor.

6 A. Yes, I have it.

7 Q. Do you have it?

8 A. Yes.

9 Q. You will recall that Mr. Olah
10 specifically drew your attention first to Cases No.
11 7 and 8 and, as Mr. Roland has pointed out and as
12 you have agreed, in those two cases it appears that
13 the last known antemortem digoxin level was obtained
14 several days in advance of the death of the involved
patient. Do you recall that?

15 A. Yes.

16 Q. All right. Let's deal with
17 Case No. 7 if we may. As Mr. Roland pointed out
18 the time interval in that case was at least four
19 days, that is, the only antemortem digoxin levels
20 set out was taken some four days before the patient's
21 death but in addition, if I have it correctly that
22 was a case that you indicated yesterday might be one
23 where the patient was experiencing renal failure as
at the time of death.

24 MR. ROLAND: No, it isn't.
25



1

2

THE WITNESS: No.

3

MS. CRONK: Case No. 7?

4

THE WITNESS: No.

5

MS. CRONK: Wasn't it Case No. 7

6

in doubt?

7

THE COMMISSIONER: All right,

8

Mr. Olah.

9

10

11

12

13

14

15

16

17

THE COMMISSIONER: Not necessarily,
not necessarily.

18

MR. OLAH: It may have been.

19

20

THE COMMISSIONER: No, it might
have been and it might not have been.

21

22

MR. OLAH: I think that is something
I should bring to your attention in all fairness.

23

THE COMMISSIONER: Yes, all right.

24

25

MS. CRONK: Q. Doctor, I am relieved



1
2 now that I have brought the second point up because
3 there appears to be some confusion about it. My
4 notes of your evidence yesterday indicate that
5 Case No. 7 was one of those where there was some
6 doubt whether or not the patient was experiencing
7 renal failure at the time of death. Did I take that
8 down incorrectly?

9 A. Yes, that is not on my list.

10 Q. It is not?

11 A. No.

12 Q. All right. Then, I am sorry,
13 I did. And moving to Case No. 8, as Mr. Roland
14 pointed out, we see that the last known antemortem
15 digoxin level in that case was taken, as he pointed
16 out, some 11 days before death, Case No. 8.

17 A. Yes, I think that is correct.

18 Q. All right. The third case
19 drawn to your attention by Mr. Olah was Case No. 11
20 and in that case by my often erroneous calculations,
21 the ante mortem, the last known antemortem digoxin
22 level was taken six days before death.

23 A. Yes.

24 Q. All right. And this again is
25 a case where I have a note of your evidence yesterday
where there was evidence of renal failure at the date



1
2 of the patient's death?

3 A. Yes.

4 Q. All right. And then the last
5 case to which Mr. Olah drew your attention was Case
6 No. 10 and I have that marked as well as a case
7 where there was evidence of renal failure at the time
8 of the patient's death. Do I have that correctly?

9 A. Yes.

10 Q. All right. Doctor, you will
11 recall yesterday as well that you were questioned
12 regarding the symptoms or possible clinical symptoms
13 which had been evidenced by these various patients
14 in the days prior to their death. As I understood
15 your discussion yesterday on this point with
16 Mr. Roland, you indicated that you had had no specific
17 discussion with any clinician regarding specific kinds
18 of symptoms, that is, bradycardia, arrhythmias,
19 vomiting, symptoms of that kind. Did I understand
20 you correctly?

21 A. Yes, that is true.

22 Q. All right. And as I understood
23 your further discussion with Mr. Roland you indicated
24 that you would assume, having regard to the severe
25 heart condition of a number of these patients, that
they may very well have exhibited symptoms of that



1

2

kind prior to their death?

3

A. Of which kind?

4

Q. Bradycardia.

5

A. Yes.

6

Q. Arrhythmia?

7

A. Yes.

8

Q. Vomiting?

9

A. Yes.

10

Q. All right. Doctor, so that

11

I am clear in respect of the matter, as I understood

12

it you have also given evidence that you spoke both

13

to Dr. Rowe and to Dr. Tepperman with respect to

14

these patients and asked them if there was evidence

15

of digoxin toxicity clinically from their point of

view. Do I have that correctly?

16

A. Yes. This wasn't going into

17

each case individually, this was a general statement.

18

Q. I appreciate that.

19

A. And included - I don't know

20

that it would include all of these on this list but

21

at different times I asked this question a number of

times.

22

Q. And in those general terms

23

did you specifically ask that of Dr. Rowe?

24

A. Yes, I asked Dr. Rowe if there

25



1
2 was indication of digoxin toxicity clinically and it
3 was my understanding that he thought not.

4 Q. That he thought not?

5 A. Yes.

6 Q. Yes, thank you, Doctor.

7 Doctor, with respect then to the
8 gutter blood study that we have spoken about that
9 was conducted by the Hospital and your Department
10 in association with Mr. Cimbura of the Centre of
11 Forensic Sciences you should perhaps have before
12 you Exhibit 238. That is the letter dated January
13 31, 1983 from Mr. Cimbura to yourself.

13 A. Yes.

14 Q. To which is attached a summary
15 of the results?

16 A. Yes.

17 Q. I will just wait while you
18 find that, Doctor.

19 A. I've got it.

20 Q. Do you have that, Doctor?

21 A. Yes.

22 Q. Doctor, you will recall a
23 discussion yesterday and again this morning with
24 respect to the apparent discrepancy that arises in
25 some cases between the postmortem digoxin levels



1
2 recorded on gutter blood samples and the postmortem
3 digoxin levels recorded on heart blood samples and
4 the evidence appears to be that certainly with
5 respect to a number of the cases set out on your
6 computer printout the gutter blood digoxin level is
7 significantly higher than the postmortem heart blood
8 level that was recorded in this same patient.

9 Q. All right. Doctor, very
10 briefly, I would ask you to examine the results
11 shown on the gutter blood samples both in Columns
12 No. 1 and 2 that formed part of the gutter blood
13 study and to compare those with the heart specimens.
14
15
16
17
18
19
20
21
22
23
24
25



J
DM/cr

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

First of all we have a total of some
28 gutter blood samples, do we not, or at least 28
different readings?

A. I would have to ---

THE COMMISSIONER: There are two
missing, it is 26 if you want to do it that way.

MS. CRONK: Q. I am sorry, that is
fair.

A. There is 14 on this list and
I would have to count them on the other list.

Q. Well, we are looking now
at Exhibit 238 and there are 14 readings.

A. Right.

Q. On gutter blood No. 1
specimen?

A. Right.

Q. And as the Commissioner quite
properly points out there are 12 in the second column,
the second category of gutter blood specimens.

A. Right.

Q. So we are looking at 26 in
total.

A. All right.

Q. Of that, Doctor, just looking
at the pure mathematics of the results, there are a



1

2

number of situations where the gutter blood results are indeed lower than the digoxin levels recorded in heart blood. I draw your attention, for example, to the case No. 1 the reading on the second sample.

5

A. Yes.

6

7

Q. Case No. 3, the reading on the second sample, the level in fact is the same.

8

A. Yes.

9

10

Q. Case No. 4 in both gutter blood samples it is the lower reading?

11

A. Yes.

12

13

Q. There are several other examples, Doctor, and I take it then that in combination the data that is provided in your computer print-out, and the data which emerged as a result of the gutter blood study, supports the view that digoxin levels from gutter blood samples can be higher, lower, or the same as digoxin levels, postmortem blood specimens drawn from the same patient, they are really all over the map?

19

20

A. Yes.

21

22

23

24

25

Q. Thank you, Doctor. Doctor, do I have it correctly as well, and I think this was confirmed again yesterday in your evidence, that the digoxin levels recorded in the first gutter specimen



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

3

column, gutter specimen No. 1, are those that were the result of the specimens taken shortly after the beginning of the autopsy under the protocol?

A. Yes, that is right.

Q. So if we are looking then for those levels most closely analogous in time to the gutter blood specimen that was taken on Janice Estrella, we should be looking to the results in the last column?

A. Yes.

Q. The results of the gutter specimens No. 2?

A. Yes.

Q. And in that case we know in Case No. 5, which is the curiously high one, Doctor, the level recorded three hours after the autopsy was 17.7 notwithstanding a much larger reading at the beginning of the autopsy?

A. Yes.

Q. So if we were looking at a number that would in point of time be most analogous to the Estrella case it would be the reading of 17.7 nanograms?

A. Yes, that is correct.

Q. Doctor, finally, introduced



Phillips, re.dr.
(Cronk)

1
2 in evidence yesterday through Miss Chown and yourself
3 were two graphs that I understood were a chart
4 representation, if you will, of the information
5 contained and compiled by you in a summary of cardiac
6 autopsies. Perhaps you could have those put before
7 you, it is Exhibit 241 and 242, Mr. Registrar.

8 A. Yes.

9 Q. Doctor, this is really
10 simply a point of clarification. As I understood
11 what you said yesterday, the second of those two
12 graphs, Exhibit 242, had what you described to be a
13 gross error, because it dealt only with autopsies
14 and not with total number of deaths, did I understand
that correctly?

15 A. Yes, that is right.

16 Q. Doctor, when we examined
17 Exhibit 241, the first graph, I take it that is true
18 of that graph as well; that is that it deals only with
autopsies per month?

19 A. Yes.

20 Q. And not with total deaths
21 per month?

22 A. That is right.

23 Q. So in that sense the two
24 graphs are similar?
25



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

A. That is correct.

Q. Neither graph, I take it
is ward specific?

A. No, this is cases from all
over the Hospital.

Q. So in neither instance
does either graph help us to know the number of
autopsies performed, either on a monthly basis, or
per 1000 days on patients from Wards 4A/4B?

A. No, that is right.

Q. Thank you, Doctor. Doctor,
then finally there has been some discussion this
morning and I think the point has perhaps been clearly
made, and I would ask you to have before you Exhibit
239, that is your report of the retrospective review
of heart deaths. We have less pieces of paper
accumulated here than perhaps you do in your files.

A. That one keeps getting
mislaidd.

Q. I will just give you another
copy, Doctor, perhaps you can use it. Doctor, you
recall a discussion which took place between the
Commissioner, yourself and Mr. Roland just a few
moments ago with respect to the pathological findings
indicative of missed SIDS?



1

2

A. Yes.

3

Q. Which were found at autopsy
in the case of Jordan Hines?

4

A. Yes.

5

6

Q. I would ask you to turn to
the last page of your report if you would.

7

A. Yes.

8

9

10

11

12

13

14

Q. And it is clear as well from
your discussion with Mr. Roland this morning that in
many situations at autopsy there can be in the best
judgment of the involved pathologists a number of
potential causes of death. In other words there can
be pathological findings evident at autopsy which
point to a number of causes of death in any given
situation?

15

A. Yes.

16

17

Q. Doctor, in the second sentence
of the second to last paragraph you state:

18

19

20

"It is obvious that a patient can have
severe pathology sufficient to cause
death but still have died from a drug
overdose."

21

22

23

I take it that is equally true in the
case of Jordan Hines as it is in any other case from
a pathologist's point of view?

24

25



7

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

A. Yes, that is right.

MISS CRONK: Thank you, Doctor, thank you for your assistance.

THE COMMISSIONER: Thank you, Doctor.

Yes, Mr. Young?

MR. YOUNG: I don't have any questions of the Doctor.

THE COMMISSIONER: You should try and escape quickly while the opportunity presents itself.

MR. YOUNG: Exhibit 241 and 242 which my friend Miss Chown put in yesterday are actually two of six charts or graphs that are included in the Dubin Report, I believe they are on page 151. I would simply point out that there are other charts or graphs that are actually provided because of the on-ward deaths basically?

THE COMMISSIONER: Where did you see these graphs?

MR. YOUNG: I believe they are on page 151 of the Dubin Report.

THE COMMISSIONER: Oh, I see, yes.

MS. CRONK: To help you further, sir, on that very point, my friend is entirely correct that there are a number of other graphs that are relevant to the question of various cardiac autopsies,



1
2 but on a close comparison of the charts that went
3 in yesterday and the ones that appear in 151, the
4 two that Miss Chown introduced are in fact not
5 replicated on page 151, they appear to be different.
6 The ones on page 151 are set out in some cases on
7 a monthly basis, but they appear to be ward specific,
8 ICU, Ward 4A/4B ---

9 THE COMMISSIONER: I am sorry, Doctor,
10 since you did not run away; tell me where did we get
11 these charts from?

12 THE WITNESS: The ones in the Dubin
13 Report were prepared I think in 1982 and we have just
14 recently updated it. So this coloured one here is an
15 updated version. The first graph in the Dubin Report
16 is this one, updated.

17 THE COMMISSIONER: Updated from the
18 Dubin Report?

19 THE WITNESS: That is the total over-
20 view from pathology.

21 THE COMMISSIONER: Yes.

22 THE WITNESS: And this one is not in
23 the Dubin Report, this is taken into account in the
24 patient census.

25 THE COMMISSIONER: You say 241 is an
update, and 242 is new?



1
2 THE WITNESS: Yes. Not prepared from
3 all the ward graphs like this, we did it at the time
4 of the Dubin Report.

5 THE COMMISSIONER: Thank you.

6 FURTHER RE-DIRECT EXAMINATION BY MS. CRONK:

7 Q. Doctor, I am sorry to do
8 this to you. Miss Fineberg reminds me, and just so
9 the record is clear, it may very well be it was
10 interpreted in a way yesterday that it should not have
11 been. With respect to Case No. 7 on your print-out,
12 the transcript from yesterday records when you were
13 reciting to me the four cases where you were uncertain
14 as to whether or not renal failure had in fact existed
15 at the time of death, you did include Case No. 7 and
16 you indicated the BUN level was taken three days prior
17 to death, so it was in your mind only a possibility
18 that there had been renal failure?

19 A. That is probably quite
20 correct.

21 MS. CRONK: Thank you, sir. Thank
22 you very much, Doctor.

23 THE COMMISSIONER: Thank you, Doctor.
24 ---Witness withdraws.

25 THE COMMISSIONER: Now, Miss Cronk, it
is 20 to one, what do you want to do?



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

10

MS. CRONK: Our next witness is
Dr. Izukawa, Mr. Commissioner, I can't assure you that
I will be finished before lunch if I start now.

THE COMMISSIONER: No, I am just
wondering what you wanted to do.

MS. CRONK: I am certainly prepared
to start now.

THE COMMISSIONER: All right, let's
start then.

TERUO IZUKAWA, Sworn
DIRECT EXAMINATION BY MS. CRONK:

THE COMMISSIONER: Dr. Izukawa, what
is your first name?

THE WITNESS: Teruo, T-e-r-u-o.

THE COMMISSIONER: Thank you. I have
it here, thank you. Yes, Miss Cronk.

MS. CRONK: Doctor, there is sometimes
difficulty here so I would ask you simply if you
could when responding to speak directly into the
microphone.

A. Yes.

Q. Doctor, as I understand it
you obtained your medical degree at the University of
Toronto in 1956, is that correct?

A. This is correct.



1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Q. You then spent, again as I understand it, two years in Toronto completing your internship before going to England where you held a number of positions until 1962 as a House Physician with various other doctors; do I have that correctly?

A. That is correct.

Q. You did your Fellowship in Paediatric Cardiology at Johns Hopkins University and Hospital in the years 1965 through to 1967; and you remained there an additional year as a Physician and Instructor in Paediatrics, is that correct?

A. That is correct.

Q. And you joined the Hospital for Sick Children back in 1968 as a Staff Physician where you have remained and become a Senior Staff Physician in the Cardiology Division; do I have that correct?

A. That is correct.

Q. In 1981, Doctor, you also became a Research Associate at the Research Institute here at the Hospital for Sick Children?

A. That is correct.

Q. Doctor, as I understand it since 1982 you have as well been a full Professor in the Department of Paediatrics at the Hospital for Sick



1

2

Children?

3

A. That is correct.

4

5

6

7

8

9

10

A. That is correct.

11

THE COMMISSIONER: That is Exhibit 244.

12

---EXHIBIT NO. 244: Curriculum vitae, Dr. Teruo Izukawa.

13

12

14

15

16

17

18

19

20

21

22

23

24

25

MS. CRONK: Q. Doctor, you are aware of course that this Commission is concerned with the deaths of a number of children on the Cardiology Wards at the Hospital for Sick Children which occurred during the period July, 1980 to March, 1981. It is my understanding that in respect to a number of those children you had some direct involvement in their care on the evening of their death, or shortly prior thereto; I would like very briefly to review those cases with you.

Dealing with the first, Doctor, that of David Taylor, we know that this child died on July 27th, 1980 at 2:02 a.m. on Wards 4A/4B. It is



1
2 my understanding that you were on call the evening
3 of July 26th, and that you were contacted at the time
4 of this child's arrest and came into the Hospital;
5 do I have that correctly, Doctor?

6 A. I believe that would have
7 been the early morning.

8 Q. Of July 27th?

9 A. Yes.

10 Q. And were you on call that
11 evening, Doctor, and contacted and came into the
12 Hospital?

13 A. Yes, that is correct.

14 Q. And Doctor, I think in this
15 particular case you are going to need the medical
16 record of the child. Mr. Registrar, it is Exhibit
17 No. 43 if you would. Thank you, Mr. Registrar.

18 Doctor, it is my understanding when
19 you were called and came into the Hospital you had
20 occasion at that time to make a note in the medical
21 records concerning the arrest suffered by the child;
22 I draw your attention to page 19 of the medical
23 record.

24 - - -
25



DP.jc
K

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Q. Do you have that, Doctor?

A. Not yet.

Q. I am sorry, page 19. It is difficult to read, Doctor, the number is at the top here.

Doctor, there is a note at the bottom of page 19, part of the progress notes, which is dated July 27, 1980 which it appears was intended to be continued over to the following page.

Can you tell me, is that your writing?

A. That is.

Q. Doctor, it appears that the remainder of the note was inadvertently cut off in our photocopying process and I have now gone to the original chart of David Taylor and extracted a copy of what I take should have been page 20, which contains the balance of your arrest note.

I would ask you to look at it, if you would, to see if you can identify it as being the second half of that arrest note?

A. It is in my writing and with my signature.

Q. Thank you.

THE COMMISSIONER: We will add that as page 19A, will we? It will be part of Exhibit 43A.



K.2

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

MS. CRONK: Thank you, sir.

THE COMMISSIONER: I see we have already got 43A. I think the sensible thing would be to make this 43B but we will put a page "19A" on it, and try to insert it in the proper place.

MS. CRONK: Thank you, sir.

--- EXHIBIT NO. 43B: Page 19A of Arrest Note.

Q Dr. Izukawa, if we examine the last part of the arrest note which appears now on page 19A of the record, you:

"Suggest that sequence of events could have been: a) regurgitation with possibly aspiration and hypoxia leading to intermittent bradycardia and A-V block (2nd degree). Hypoxia and bradycardia leading to reduced output and ischaemia because of severe aorta stenosis. This progressed to ventricular fibrillation.

"2) Review of medication shows no evidence of overdosage or error in dosage."

Do you recall, Doctor, at the time that you attended at the Hospital at the arrest of David Taylor, after the child had been pronounced dead,



K.3

1

2

3

4

taking the occasion to review the medications which
had been prescribed to the child, including the
doses of digoxin that had been prescribed?

5

A. Yes.

6

7

Q. Why, in this case, did you do
that, Doctor?

8

A. Because of the rhythm disturbances
that were noted in the period prior to the arrest.

9

10

11

12

13

Q. Were you concerned at that time,
Doctor, to determine whether or not there had been an
error made in any of the medication which had been
prescribed to the child including in the digoxin
medication that had been prescribed?

14

A. That is correct.

15

16

17

18

19

20

Q. I take it, from the language of
the conclusionary remarks in your arrest note that you
were concerned to determine, first that there had not
been an overdosage, that is the administration of too
much of a prescribed drug for the child and, secondly,
that there had not been an error in the amount of
the dosage that had been calculated and then
administered?

21

A. That is correct.

22

23

Q. Do I have that correctly?

24

25

A. Yes.



K.4

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Q. And you had specifically in mind at that time, amongst other medications that had been prescribed, the digoxin medicine that had been prescribed and administered to him?

A. That is correct.

Q. Was it your normal practice, Doctor, when called in as the senior staff cardiologist on call, when called in to an arrest to undertake a review of the medications which had been prescribed and administered to the particular patient?

A. If there is reason to suspect that it might have been due to medication such as with the rhythm changes I would normally do that.

Q. In this case, Doctor, you mentioned that there were rhythm changes. Were those changes the factors that led you to undertake a review of the medication that had been ordered and prescribed?

A. That is correct.

Q. What specifically about the rhythm changes in this child caused you concern?

A. The occurrence of tachycardia with the degree of block.

Q. The second degree A-V block?

A. Yes, and also with the changes in the ST segments which were occurring at that time.



K.5

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

THE COMMISSIONER: Sorry, the changes
in what?

THE WITNESS: The ST segments.

MS. CRONK: Q. That is the segment on
his ECG reading that you are referring to, Doctor?

A. That is correct.

Q. And you are referring then to
the rhythm changes of which you make specific note
in your summary of the arrest which appears at page
19 and page 20?

A. That is correct.

Q. Doctor, was the factor of those
particular kinds of rhythm changes happening at all
of concern to you or was it something to do with the
combination of those rhythm changes that struck you
as being of potential concern?

A. It was the combination of the
change that I mentioned.

Q. Was that combination, in your
view, unusual?

A. Not unusual, but realizing that
one of the causes of such a change might be medication,
I reviewed that.

Q. And Doctor, after you had undertaken
your review of the digoxin which had been administered



K.6

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

to the child, what conclusion did you reach?

A. I concluded that the dosages were correct as recorded in the Order Sheet and therefore that the rhythm disturbances were probably related to the patient's basic underlying lesions.

Q. Doctor, have you had an opportunity to review the evidence before this Commission given by Dr. Richard Rowe concerning this child and his death?

A. Yes, I have.

Q. Dr. Rowe testified then, as you are aware, Dr. Izukawa, that the terminal events of this child followed a very rapid course, and that he exhibited at the time of his death cardiac arrhythmias of the kind you have just outlined, heart block, changes on his ECG and vomiting, all of which in Dr. Rowe's opinion could be regarded as consistent with digoxin intoxication.

That evidence, Mr. Commissioner, is found at Volume 11, pages 1863 to 1864.

Dr. Izukawa, do you agree or disagree with that opinion as expressed by Dr. Rowe?

A. I would not disagree with the opinion but would add that there are other possible causes of the symptoms and changes that have been described.



K.7

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Q And in fairness, Doctor,
Dr. Rowe also testified before the Commission that
the terminal events experienced by the child, the
manner of their onset and their subsequent course,
were consistent as well with his anatomical and
clinical condition, and I take it you would agree
with that, in light of what you have just said?

A Yes.

Q Thank you, Doctor.

Doctor, other than the additional
factor to which you have drawn our attention that there
are, in your opinion, a number of matters which could
account for those kinds of terminal events, is there
anything that you wish to add to the evidence that has
already been given by Dr. Rowe with respect to the
death of this child?

A No, I would not.

Q Doctor, may we turn then to the
next child, Amber Dawson. We know from prior evidence
that this child died on July 28, 1980, one day after
David Taylor, and again in the very early hours of
the morning, at 2:40 a.m. It is my understanding
once again, Doctor, that you were on call the
morning of her death and that you were contacted at
the time of her arrest. Do I have that correctly?



K.8

1

2

A. That is correct.

3

4

5

6

7

Q. Once again, Doctor, as I understand it, once you were contacted at the time of her arrest, you came into the Hospital and indeed in this case ultimately pronounced the child to be dead. Do I have that correctly?

8

9

Let me help you with that if I can, Doctor. I do not know if you have the medical record there?

10

A. No, I don't.

11

12

Q. The Registrar is just handing it to you. Exhibit 59.

13

14

If you could turn to page 80. Do you have that Doctor?

15

A. Yes, I have.

16

17

18

19

20

21

22

23

24

25

Q. Doctor, this is an extract from the progress notes and I draw your specific attention to a note made by Nurse Susan Nelles which commences at the bottom of page 80. The time is 2130 hours and she indicates that the apex of Amber Dawson was noted to be dropping, the rate was 79 and falling, and that Dr. Reynolds was notified. She then goes on to describe the respirations of the child, the child's colour, indicates there was some seizure activity and a Code 25 was called and cardiopulmonary resuscitation



K.9

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

was initiated. She then indicates that Dr. Izukawa pronounced the baby expired at 0240 hours in the morning.

Do you see that, Doctor?

A. Yes.

Q. I take it then in this case, like that, and indeed if you look again at page 80 at the top of the page you see a note there dated the 28th of July, 1980 which I take to be your arrest note, signed by you, with respect to Amber Dawson?

A. That is correct.

Q. Once again, Doctor, have you had an opportunity to read the evidence of Dr. Rowe given before the Commission with respect to this child and the manner and circumstances of her death?

A. Yes, I have.

Q. Dr. Rowe testified, Dr. Izukawa, and as you are thus aware, having reviewed his evidence, that Amber Dawson suffered, in his opinion, a sudden onset and rapid course of terminal events and there was in his mind still some doubt about the direct cause of her death.

That evidence, Mr. Commissioner, is found at Volume 12, page 2128.

Stopping there, Doctor, do you agree



K.10

1

2

with that characterization of her terminal events
as outlined by Dr. Rowe?

3

4

5

6

7

A. I think the post mortem findings
do add some information to the possible terminal events
as well. I refer to the occurrence of perforation
of the stomach which was noted by the pathologist.

8

9

10

11

12

13

Q. There were two - perhaps unfairly
Doctor - two parts to that question. The first part
of it was that Dr. Rowe had indicated that in his
opinion the terminal events themselves sustained by
Amber Dawson had a sudden onset and that, once having
commenced, proceeded rapidly ending in an unsuccessful
resuscitation effort.

14

15

16

17

Stopping there, having regard to your know-
ledge of the condition of this child and your presence
at her arrest, do you agree that there was a rapid
onset and rapid progressive deterioration leading
to the child's death?

18

19

A. Are we speaking in terms of
minutes, hours or --

20

21

22

Q. Let us talk about the events
having commenced which lead to the arrest and led to
your being called into the Hospital, and compare that
with her condition earlier that evening?

23

24

25

A. Yes.



K.11

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Q. Are you sufficiently familiar with her condition, Doctor, to offer us an opinion as to whether the onset of those terminal events could be appropriately described as being sudden and proceeding rapidly?

A. I knew that she was in difficulty during the day, that there was a question of her developing possibly a new infection in the right lung at the time, and that she was being treated for that, and that the blood gases drawn at that time suggested that there was a respiratory problem possibly related to the paralysis of the right diaphragm and/or the infection that was suspected.

Q. And those matters, you have indicated, were apparent during the course of the day preceding the child's death?

A. I believe so, during the afternoon and evening.

Q. And, Doctor, you have referred us as well to the pathology findings that were evident at autopsy. Do I take from what you have said that when you were made aware of the autopsy results on this child you felt there was an adequate explanation for the child's death?

A. That would add to the problem



K.12

1

2

and probably the sudden deterioration or, as you say, the rapid change that occurred through the evening and the night.

4

5

Q. Doctor, I take it that after the autopsy had been performed you were in due course informed as to what the pathologist's views were as to what had been evident at autopsy?

6

7

8

A. I had read his report, yes.

9

10

11

Q. And on the basis of your review of the autopsy report, were you satisfied that Amber Dawson's death had been adequately explained by what was evident at autopsy?

12

13

A. We felt the additional information did help to explain her death.

14

15

16

Q. By the additional information you are referring to the pathological indicators of perforations in her stomach?

17

A. That is correct.

18

19

20

21

22

23

24

25

Q. Doctor, as you know, having reviewed Dr. Rowe's evidence he also testified that in his opinion the terminal events suffered by Amber Dawson, the manner and course of their onset about which we have just spoken, were consistent in his view with the clinical and anatomical conditions of the child as known both during her life and as



K.13

1

2

confirmed at autopsy. Do you share that view?

3

A. Yes, I do.

4

5

6

7

8

9

Q. Dr. Rowe testified as well as he has with respect to a number of children that the terminal events of this child, and again the manner of their onset and their course, were consistent with digoxin intoxication.

Do you agree or disagree with that view?

10

11

12

13

14

A. I would add that there were other factors that could have led to the final electrical events and that was why I mentioned that probably the perforation of the stomach did add to that and might have precipitated the bradycardia.

15

16

17

18

19

Q. I take it then, Doctor, that the perforation in the child's stomach which was not confirmed until the autopsy had taken place, might in your view have triggered the kind of bradycardia that this child exhibited at the time of her arrest. Do I have that correctly?

20

21

22

23

24

25

A. That is correct. I would regard that as possible final event.



BmB.jc
L

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Q. And as well, Doctor, is it your opinion that the nature of the terminal events which were displayed with her are as well consistent with digoxin intoxication or is that an opinion with which you disagree?

A. Well, I could not rule that out completely because digoxin intoxication can mimic other causes of symptoms that occur.

Q. All right. Doctor, we have seen in the case of David Taylor that when you were called into the Hospital and attended at the arrest of the child that you were sufficiently concerned, if you will, by the nature of the terminal events that you had observed and had described to you that you undertook a review of the medications which had been prescribed and administered to him. Did you do so in the case of Amber Dawson?

A. I don't recall that I did but in most cases I do. In this particular case there was not the rapid changes in the rhythm that I had noticed in David Taylor's case. So that the suspicion or concern was not as much.

Q. Did you, at the time of her death, have any concern at all, Doctor, that digoxin intoxication may have contributed to her death?



L.2

1

2

A. No, I did not.

3

Q. I take it that the possibility

4

then of an overdose of medication, be it digoxin or

5

another drug, was not a matter that occurred to you

6

then?

7

A. No, it did not.

8

MS. CRONK: Mr. Commissioner, may we

9

stop there?

10

THE COMMISSIONER: All right. 2:30

11

then.

12

MS. CRONK: Thank you, sir.

13

--- Luncheon recess.

14

15

16

17

18

19

20

21

22

23

24

25



1

2

---On resuming at 2:30 p.m.

3

THE COMMISSIONER: Yes, Miss Cronk.

4

MS. CRONK: Thank you, sir.

5

Q. Dr. Izukawa, before the

6

luncheon break we were discussing the case of Amber

7

Dawson and the terminal events which were suffered

8

by that child the evening of her death and we know,

9

both from your arrest note which appears in the

10

medical record and that of the attending nurses, that

11

amongst the symptoms exhibited by the child was

12

bradycardia, described as extreme bradycardia in your

13

A. Yes.

14

Q. She was slightly tachypneic,

15

she had seizure like activity, she was sweaty, her

16

apex was dropping and her respirations were laboured.

17

Was there anything about the combination of those

18

events, Dr. Izukawa, that caused you to be concerned

19

as to why the child had died at the time and in the

20

A. I believe we were not

21

absolutely certain that the lung lesions alone may

22

Q. Well, you have told us that

23

in the afternoon prior to her death there was a

24

25

AA
BB/cr



1
2 respiratory difficulty which had been observed and
3 which had been discussed that day.

4 A. Yes.

2
5 Q. Would you expect to see
6 terminal symptoms both of bradycardia and tachypnea
7 with a child with increased respiratory difficulty?

8 A. If there was severe
9 hypoxia.

10 Q. All right.

11 A. It is possible, yes.

12 Q. I take it then, Doctor, that
13 unlike the case of David Taylor there was nothing
14 about the particular combination of terminal events
15 in the case of Amber Dawson that caused you to be
16 concerned at the time that you were notified about her
17 arrest?

18 A. Well, we weren't concerned
19 in the afternoon. As far as at the time of arrest
20 there was some concern, yes.

21 Q. All right. And were you
22 concerned at that time with respect to the nature of
23 the terminal events that she had suffered?

24 A. Not the nature itself, it
25 was the terminal event.

Q. All right. By the terminal



3

1

2

event the fact of the arrest per se?

3

A. Yes.

4

Q. I see. And why were you
concerned in that regard?

5

6

A. Well, as I stated, I wasn't
absolutely certain that the degree of pulmonary
involvement was sufficient, although, we knew from
the blood gases taken at that time that it was
respiratory difficulties.

7

8

9

10

Q. And I take it then that
after the child had died you were at that stage not
in a position to know about the perforation that was
found at autopsy to have existed in her stomach?

11

12

13

A. That is correct.

14

15

Q. All right. And as that
factor was not known to you you were left then with
a situation where there was evidence of increased
respiratory difficulty and some concern as to whether
or not the problem with the right lung was sufficient
to have caused the terminal events that were suffered
in the arrest itself?

16

17

18

19

20

21

A. Although, we felt that in
the debilitative condition of the child that this might
explain it.

22

23

Q. All right.

24

25



1

2

A. But not absolutely.

3

Q. I'm sorry?

4

A. But not absolutely.

5

Q. All right. Doctor, we have

6

heard from other evidence that Dr. Schaffer reported
the death of Amber Dawson to the Coroner's Office.

7

Did you participate in the decision to report this
death?

9

A. I believe I did, although,
I don't recall directly. I don't think he would have
consulted the coroner himself on his own.

10

11

12

Q. I take it you have no

13

specific recollection today of having discussed the
matter with him but you consider it likely then that
you did so?

14

15

A. That is correct, yes.

16

Q. All right. Do you recall

17

then, Doctor, why the case, the death of Amber Dawson
was reported to the coroner?

18

19

A. Well, as I say, we were not
absolutely certain that the pulmonary lesion itself
would explain the terminal event.

20

21

Q. All right. Doctor, you have
told us earlier today that after the autopsy was
conducted on Amber Dawson you did have occasion to

22

23

24

25



1

2

receive it and to review it?

3

A. That is correct.

4

5

6

Q. I take it then, Doctor, that you are aware that the attending pathologist, Dr. Cutz, was unable to pinpoint a specific anatomical cause of death for this child?

7

8

A. I read that, yes.

9

10

11

12

Q. All right. And with that fact in mind and having reviewed the autopsy report, did you at that stage have any lingering concern as to why the child had died at the time and in the manner which she had?

13

14

A. I did not because, as I stated, I thought the perforation would explain the onset of the bradycardia.

15

16

17

Q. All right.

A. Which we were not quite able to do before her death.

18

19

20

21

Q. All right. I take it then, Doctor, that by the time the autopsy results were made available to you, you felt that an adequate explanation in medical terms had been presented to explain her death?

22

23

24

25

A. I was satisfied, yes.

Q. All right. Doctor, at any



1

2

3

4

5

6

time during the arrest of Amber Dawson or thereafter when the matter was reported to the coroner or pending the completion of the autopsy, did you consider whether or not digoxin intoxication might have played any part in that child's death?

7

8

9

10

A. We did not because we were aware of one of the digoxin levels as being well within normal limits during her hospitalization.

11

12

13

14

15

16

17

Q. And you are referring now to the last ante mortem level obtained?

18

19

20

21

22

23

24

25

A. That's right, yes.

Q. Doctor, with the death of Amber Dawson and your being called in to the Hospital, that was the second time in 48 hours that you were called to attend at an arrest in the early hours of the morning with respect to an infant who was dying on Wards 4A and 4B. Did that at the time seem unusual to you in any way?

A. Not at that particular time.

Q. Did it subsequently?

A. I believe I was involved with another case at about the same time in the morning and, so, the question did arise, well, why are these deaths occurring in the morning, so early in the morning.



1

2

Q. And was that other death

3

in the summer of 1980 as well?

4

A. I believe it was, in

5

August.

6

Q. Doctor, perhaps we will

7

come to it then in the course of our further dis-
cussions.

8

May we turn to the case of Phillip

9

Turner. We know that Phillip Turner died on August

10

1st, 1980 and, as I understand it, once again you

11

were the senior staff cardiologist on call and you

12

were contacted when the child went into arrest. Do

13

I have that correctly, Doctor?

14

A. That is correct.

15

Q. As I understand it, as you

16

did in the prior two cases, once contacted you came
in to the Hospital?

17

A. That is correct.

18

Q. Doctor, I would ask you to

19

turn - do you have the medical chart of Phillip Turner
there?

20

A. Yes.

21

Q. It is Exhibit No. 44. I

22

would ask you to turn if you would to page 52 of the

23

record, which is part of the progress notes. Do you

24

25



1

2

have that, Doctor?

3

A. Yes, I have it.

4

Q. All right. Doctor, there

5

is a note which appears at the top of page 52 which

6

is dated August 1st, 1980, 2:38 a.m. and, once again,

7

I take that to be your arrest note made after the

8

arrest of the child?

9

A. That is correct.

10

Q. It appears to be your habit,

11

Doctor, that when, as the senior staff cardiologist,

12

you are called in to an arrest that you take the

13

occasion either during the arrest or after the child

14

has in fact been pronounced dead to make a note in

15

the medical record of the child recording the fact

16

that you were there and the observations which you

17

made at the time. Was that your usual practice?

18

A. Yes, it was.

19

Q. All right. And in the

20

case of Phillip Turner, in the arrest note you indicate

21

that throughout the afternoon and evening the cardiac

22

status of the child appeared to be controlled. I take

23

it, Doctor, that prior to this child's arrest his

24

condition therefore insofar as you were aware was

25

relatively stable?

A. The child was in heart failure



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

but appeared to be under control with the medical treatment we felt.

Q. All right. And having regard to that fact, Doctor, were you concerned with the nature and course of the terminal events which he exhibited?

A. Well, of course, I had seen the chest X-ray which did show some changes. I believe this is a child who had changes in the left lung. Yes, that's right, which were somewhat different from the X-rays taken at the time he was sent up from the Intensive Care area.

Q. Were those changes to the left lung, Doctor, sufficient both in nature and degree to account in your view for the terminal event which he suffered?

A. Well, of course, the child had other lesions within the heart that were not corrected at surgery.

Q. Doctor, I suppose then the remaining issue, having regard to the fact that earlier that afternoon and during the better part of the evening, his cardiac status was felt to be under control, whether or not the timing of the arrest and the terminal events was such as to cause you any



1

2

concern or surprise?

3

A. I don't believe so because

4

I felt that the lesions were severe enough that changes
could have occurred quite suddenly.

5

6

Q. Was it perceived, Doctor,

7

that evening and late afternoon that the child was
in imminent risk?

8

A. Well, as I stated, there was

9

some concern expressed, otherwise, the chest X-rays

10

wouldn't have been done.

11

Q. All right. Doctor, once

12

again, have you had an opportunity to review Dr. Rowe's
evidence with respect to the clinical condition of
this child and the circumstances of his death?

13

14

A. Yes.

15

Q. All right. You know then,

16

Doctor, that Dr. Rowe testified that the nature and

17

manner of the onset of Phillip's terminal events

18

were consistent in his view both with the clinical

19

and anatomical conditions of the child. Is that a

20

view that you share?

21

A. I think so, yes.

22

Q. Dr. Rowe further testified

23

that the terminal events and their pattern of onset

24

and their rapid course thereafter were also consistent

25



1
2 with digoxin intoxication. Is that a view with which
3 you agree?

4 A. Well, at that time we didn't
5 consider digoxin as possible etiology. The reason
6 being we felt that the clinical condition would account
7 for the death of the child.

8 Q. All right. Well, Doctor,
9 I recognize that at the time of the child's arrest
10 the possible involvement of digitalis toxicity was
11 not a matter which came to your mind at the time, but
12 looking back on it now and recognizing the kinds of
13 symptoms which the child did exhibit at the time of
14 his arrest and at the time of his death, are those
15 symptoms and terminal events in your view consistent
16 with digoxin intoxication?

17 A. They could be, yes.

18 Q. All right. Doctor, you
19 have told us you will recall that in the case of
20 David Taylor again, because of the particular terminal
21 events or symptoms which that child exhibited, you
22 undertook after his arrest a review of the various
23 medications that had been prescribed and administered
24 to the child. Did you do so in this case?

25 A. I don't recall specifically
since I haven't written anything in the notes.



1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Q. Well, to help you with that, Doctor, I have not found anything in the medical record that indicates in a formal written fashion that you did so. I take it that you cannot now recall having done so?

A. No.

Q. All right.

A. But having recognized that, there were a number of digoxin levels taken during life which were within normal limits. I don't think I would have been as concerned as with the Taylor child.

Q. Doctor, is there anything that you would wish to add to the evidence that we have received from Dr. Rowe with respect to the death of this child or the circumstances of his death?

A. No, I wouldn't.

Q. May we turn then to the next child with whom I understand you had some involvement prior to death and, that is, Dion Shrum whom we know died on August 9, 1980 at 7:45 p.m. in the evening. It is my information, Doctor, that you were ward chief at the time of this child's death but you were not, as I understand it, on call the evening of the child's death, is that correct?



1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

A. That is correct, nor was I -
that happened over the weekend, it was on a Saturday
I believe, or Sunday morning.

Q. The death occurred at a
time when you were ward chief but you were not in the
Hospital that weekend?

A. No, I was not on call. My
place was being taken by Dr. Freedom who had seen the
child initially in out-patients and he had carried on
the care over the weekend.

Q. Doctor, it is my under-
standing as well that in your capacity as ward chief
you signed the final discharge report with respect to
this child?

A. That is correct. The chart
would have been brought to me for final disposal.

Q. And prior to actually
signing the discharge report, which I take it may
well have been prepared by others for your signature?

A. Yes.

Q. You would have had an
opportunity to familiarize yourself with the terminal
events sustained by the child and the nature of his
death?

A. I would have gone over the



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

chart and the nature of his death. I would have gone over the chart, yes.

Q. And have you as well, Doctor, had an opportunity in this case to review Dr. Rowe's evidence before the Commission concerning the child?

A. Yes, I did.

Q. You know then, Doctor, that Dr. Rowe testified that in his opinion he was satisfied that the time and manner of the child's death and the arrest itself were consistent with his cardiac illness. Do you agree or disagree with that view?

A. I would agree with his opinion.

Q. And as well as we have seen in the other cases that we have reviewed, Dr. Rowe testified that the particular terminal events sustained by this child and the manner of their onset and course thereafter were consistent in his view with digoxin intoxication. Is that a view that you share?

A. I think it's possible to say that because the symptoms and signs could be and it would be difficult to say that it wasn't unless you had information that that was the case that there was ---



1

2

THE COMMISSIONER: I am sorry, I
didn't hear that, Doctor, what was that?

4

THE WITNESS: The symptoms and signs
of digoxin intoxication are not specific to digoxin,
so that I would have to answer yes.

5

6

THE COMMISSIONER: Yes.

7

8

9

10

11

12

MS. CRONK: Q. All right. I take
it then, Doctor, and we have heard from Dr. Rowe as
well, that although the terminal events of these
various children that we are looking at can be said
from a clinician's point of view to be consistent
with digoxin intoxication, they are not necessarily
indicative of digoxin intoxication?

13

14

A. That is correct.

15

16

17

18

19

Q. All right. Doctor, was
there anything about the combination of terminal
events suffered by this child or the timing of his
death that caused you as ward chief to question why
he had died at the time that he did and in the manner
that he did?

20

21

22

23

24

25

- - - - -



B/DM/ak

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Q. Doctor, can we then turn to the case of Antonio Adamo. This child we have heard in evidence died on October 19th, 1980 at 5:45 p.m. As I understand it ---

THE COMMISSIONER: I am sorry, you mentioned somewhere I think - I think when we were discussing Amber Dawson, that you didn't react to the death of Amber Dawson immediately following David Taylor, and then you said perhaps possibly another child, was that the Turner child, and did the combination of the three coming within two days, did that disturb you?

THE WITNESS: I think it is more the timing that these events appeared to occur in the early hours of the morning.

THE COMMISSIONER: And how did that disturb you?

THE WITNESS: Because I was asked to come in from a sleep.

THE COMMISSIONER: Was it a matter of inconvenience or was it the ---

THE WITNESS: Well that was one I hadn't really had to do this in succession as I had at that time.

THE COMMISSIONER: Did you draw any



1

2

conclusions from that?

3

THE WITNESS: Not at that time.

4

I just thought it was unusual to be called at that particular time.

5

6

THE COMMISSIONER: Yes, all right.

7

Thank you.

8

MS. CRONK: Q. Doctor, I take it

9

then that prior to these three tests you did not have the experience where you were called at home

10

in the early hours of the morning to come in to attend

11

at an arrest which was occurring in respect of an

12

infant on Ward 4A/4B?

13

A. Well, not three times in a row.

14

Q. The fact that those three did

15

happen in succession with some similarity in time

16

in the early hours of the morning was a matter about

17

which certainly you, certainly it was something you

18

observed at that time, that it was unusual that that was happening?

19

A. That is correct.

20

Q. Did it occur to you at that

21

time, Doctor, that apart from the timing of those

22

arrests that there appeared to be any similarity in

23

the terminal events that those children were

24

suffering?

25

BB2



BB3

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

A. No, because I felt that the events of electrical disturbance and so on would be common to all if not most - most if not all of the cardiac deaths that we do experience.

Q. Doctor, we come then to the case of Antonio Adamo. This child died on October 19th, at 5:45 p.m. You were, as I was saying a few moments ago, as I understand it you were on call on the evening of this child's death as you were in the other instances that we have spoken about; am I correct in that, Doctor?

A. That is correct.

Q. And once again you were contacted at the time of the child's arrest and arrived at the Hospital prior to the child actually being pronounced dead?

A. I didn't realize I was there personally.

Q. Doctor, to help you with that the medical record of Antonio Adamo is Exhibit No. 68, do you have that, Doctor?

A. Yes, I have.

Q. I would ask you to turn if you would to page 34, progress notes.

A. Yes.



1

2

BB4

Q. Do you have that, Doctor?

3

A. Yes.

4

Q. Doctor, on my review of this

5

arrest note together with the notes made concerning

6

the arrest by the various nurses who were in

7

attendance, it appears that a Code 25 was called

8

at 4:15 p.m. in the afternoon; that a lengthy

9

resuscitation effort then ensued, lasting approxi-

10

mately one and a half hours, and then there appears

11

in the chart an arrest note which I take to have

12

been written by you during your attendance on the

ward at the arrest of the child?

13

A. Yes.

14

Q. Do you recall, Doctor,

15

actually having been in attendance for the better

16

part of the resuscitation effort, or did you arrive

17

towards the end of the resuscitation before the

child was pronounced dead?

18

A. I am not sure whether I was

19

there before the event or during the event.

20

Q. Doctor, reviewing the note

21

that you did make in the medical record, in the

22

first paragraph; you describe the child's condition,

23

and then indicate, starting on October 18, 1980:

24

"On maintenance digoxin but suggested

25



BB5

1

2

"full digitalization in the next 24
hours at calculated total dose 0.05
mg..."

3

4

5

Is that milligrams? I'm sorry, it is micrograms.

6

A. That is milligrams.

7

Q. And:

8

"...use of Lasix and aldactone.
Electrolytes and venous gases
satisfactory."

9

10

11

12

13

14

15

I take it, Doctor, as part of the
considerations which you had in mind at the arrest
of this child, you did as you did in the case of
David Taylor, lend your mind to the various medica-
tions that had been prescribed and administered to
the child.

16

17

A. I would probably refer to the
earlier part of the day when I would have made
rounds in the Hospital, in the morning.

18

19

Q. Are you suggesting this note
was made earlier in the day, Doctor?

20

A. No, no.

21

THE COMMISSIONER: I am sorry, where
is this?

22

23

MS. CRONK: Page 34 of the progress
notes.

24

25



BB6

1

2

3

THE COMMISSIONER: I was looking
at it but I haven't found it yet.

4

5

MS. CRONK: Starting at the bottom
the note is dated October 19th, 1980.

6

7

THE COMMISSIONER: Yes, I have it.
I see, all right.

8

9

THE WITNESS: The suggestion of
increasing treatment would have been made earlier.

10

11

MS. CRONK: Q. Doctor, I am a
little confused by that. If we continue on with
your note.

12

A. Yes.

13

Q. You indicate:

14

"This afternoon while ng..."

15

I take that as nasal gastric tube?

16

A. Yes.

17

Q. "...while ng tube being passed
to supplement feeding, bradycardia
noted to be less than 50 per minute."

18

19

A. That is correct.

20

Q. "Resuscitative efforts started."

21

I took this note on a reading of it
in full to be a note which you made after the
arrest of the child?

22

23

A. That is correct.

24

25



BB7

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Q. My question to you then, is when you were in attendance at the arrest of the child and when you were writing a summary of the events which took place at the arrest, did you have in mind at that time as well a consideration of the medication which had been administered to the child?

A. I think I took the opportunity at that time to write the events that I recalled of the morning.

Q. And was your purpose in doing so the same purpose that you had in the case of David Taylor, namely to determine whether or not any error had been made with respect to the medications that were ordered and administered?

A. I don't believe so. That would be written just to indicate that I thought the child was in more severe failure than the resident would have noted.

Q. Was there anything in the terminal events which you observed in this child, Doctor, be it in the individual nature of the events, or in the combination of the events, which caused you to question whether or not digoxin intoxication had played a part in his death?



BB8

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

A. I don't believe so, because I felt that the passage of the nasal gastric tube might have precipitated the arrhythmia.

Q. Doctor, have you in this case as well had an opportunity to review the evidence of Dr. Rowe concerning this child's death?

A. Yes, I have.

Q. You are aware then, Doctor, I take it that once again Dr. Rowe testified that the terminal events suffered by this child, their onset and their subsequent course, were consistent in his opinion with the clinical and anatomical condition of the child; do you agree or disagree with that view?

A. I would agree.

Q. And we know that Dr. Rowe has also testified once again that those same terminal events and their pattern and the degree, the speed of their course were consistent in his view with digoxin intoxication, and in this case do you agree with that?

A. I think I would say that it would not possible to differentiate from the symptoms and signs as to which was the cause, bearing in mind the non-specific nature of the symptoms of



BB9

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

digoxin overdose.

Q. Well recognizing that, Doctor, and bearing in mind the terminal events that this child did have, I take it then that in your view, although not indicative of digoxin intoxication they, like the others we have seen, are consistent with digoxin intoxication.

A. I thought at the time it was the passage of the nasal gastric tube that precipitated the events.

Q. Have you in your experience on the cardiology wards, Doctor, seen in other instances a cardiac arrest in an infant being triggered by the passage of a nasal gastric tube?

A. This is unusual, but it can occur, it is a strong vagal stimulation.

Q. I am sorry, Doctor?

A. It is a strong vagal stimulation which would reduce the heart rate.

Q. And prior to the case of Antonio Adamo, had you had experience with the patient where that had happened on the cardiology wards?

A. I can't recall specifically. There is another, one other patient who had the



BB10

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

nasal gastric tube passed, I can't remember the exact name of the child.

Q. Could the passage of a nasal gastric tube in your view and the circumstances in which it was carried out in this case, cause the kind of terminal events and symptoms that we see recorded in the arrest note of the child?

A. It certainly could cause the arrhythmia disturbances.

Q. Are you referring in that regard to the bradycardia, for example, Doctor?

A. That is correct.

Q. Could it as well result in the development of ventricular fibrillation and junctional rhythm?

A. I would state that the bradycardia comes first, then of course the cardiac output would drop, leading to hypoxia and then hypoxia to ventricular fibrillation.

Q. I take it then, Doctor, that the particular pattern which appears to have occurred in this case, that is bradycardia reverting back to sinus junctional rhythm with low electrical output from the heart and then proceeding to ventricular fibrillation is not a sequence of events that you



BB11

1

2

would find unusual when accompanied by the passing
of a nasal gastric tube?

3

4

A. As I say it is not a common
event, it is uncommon, but it can occur.

5

6

Q. Doctor, is there anything you
would like to add to the evidence that has been
given so far as you are aware by Dr. Rowe with
respect to the death of this child and the circum-
stances surrounding his death?

7

8

9

10

A. No.

11

12

Q. May we turn then, Doctor, to
the last child; I'm sorry, the second to last child
with whom I am particularly concerned. That is
the case of Real Gosselin. We know from prior
evidence that this child died on December 18th,
1980. It is my understanding that you were ward
chief at the time the child died, is that correct?

13

14

15

16

17

A. That is correct.

18

19

20

21

Q. And as I understand it,
Doctor, as well you were called to see the child
at the time of his admission to the Hospital on
December 17th in the late afternoon, is that correct?

22

23

24

25

A. That is correct.

Q. I recognize, Doctor, that
you were not on call at the time of the child's



BB12

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

death early in the - in the early morning hours of
December 18th; but I take it as Ward Chief that you
would have been made aware first of the child's
death and secondly of the circumstances surrounding
his death at the morning cardiology conference held
on December 18th after the child had died?

A. That is correct.

Q. Doctor, have you as well had
an opportunity to review Dr. Rowe's evidence with
respect to this child?

A. Yes, I have.

Q. You know then that Dr. Rowe
was again specifically asked to address his attention
to the terminal events suffered by the child.

A. Yes.

Q. He stated in that regard that
the time and manner of the child's death were, to
use his words "Very much consistent with the child's
anatomical and clinical condition as known at the time
of his death". Do you agree with that view, Doctor?

A. Yes, I do.

Q. Doctor, he also testified that
the time and manner of the child's death were as
well consistent with digoxin intoxication, and
bearing in mind what you have said about previous



1

2

children I take it you would agree with that view
as well?

3

4

A. Yes.

5

6

7

8

Q. Are you familiar, Doctor,
with the digoxin doses which were administered to
this child in Winnipeg prior to his admission to
the Hospital for Sick Children?

9

10

11

12

13

A. Yes, I knew the dosage that
was given.

Q. That would be a matter I take
it that would have been brought to your attention at
the time that you saw the child on his admission?

A. That is correct.

14

15

16

17

Q. In your view, Doctor, were
the doses which had been prescribed and administered
in Winnipeg, in amount or number, sufficient to
cause toxic effects from digoxin in this child?

18

19

20

A. The dosage, the digitalizing
dosage was somewhat higher than we would use, but
not to levels that we would think would cause
toxicity.

21

22

23

24

25

Q. And I take it then, Doctor,
that in light of the fact that the doses which you
knew to have been administered in Winnipeg were
slightly higher than would have been ordered for



BB14

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

example in your Hospital, that was a motivating factor in ordering digoxin to be held on the day the child was admitted to the Hospital for Sick Children?

A. That is correct, until the level was obtained.

Q. Doctor, bearing in mind that the child then died several hours later, shortly after having been admitted to the ward, when you became aware that the child had died and when the terminal events were described to you, did you have any concern at that point that digoxin intoxication may have contributed to his death?

A. Well, we knew there was a level of 3.9 and that would not have caused us to believe that was a cause of death.

Q. What I was suggesting to you, Doctor, was perhaps something a little bit different; that is recognizing that the digoxin level was 3.9 on admission.

A. Yes.

Q. And then having provided to you the additional information of the type of terminal events suffered by the child and knowing the timing of those terminal events, did you in



BB15

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

assessing all of that information have any reason
to think that digoxin intoxication may have played
a part in the child's death?

A. No, we did not.

Q. Doctor, apart from the evidence
that we have already heard from Dr. Rowe with
respect to Real Gosselin's death, is there anything
that you would like to add?

A. No.

Q. Doctor, may we turn then to
the case, the final case which I would like to
discuss with you, that is the case of Stephanie
Lombardo. We have heard in evidence that this
child died on December 23rd, 1980 at 4:20 a.m.
Once again as I understand it you were ward chief
at the time of the child's death, is that correct,
Doctor?

A. That is correct.

Q. You are aware I take it,
Doctor, that the child was not on digoxin therapy
at the Hospital prior to her death?

A. That is correct.



lnov83
CC
DPra

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Q. Although not on call, as I understand it, doctor, the evening that she died, I take it once again that, as Ward Chief, you would have been made aware, first, of the fact of her death and, secondly, of the circumstances surrounding her death, at the morning cardiology conference held on December 23rd?

A. That is correct.

Q. And you are, I take it as well, doctor, familiar with Dr. Rowe's evidence concerning the death of this child?

A. Yes, I am.

Q. Dr. Rowe testified that Stephanie Lombardo experienced a rapid and dramatic decline following her transfer back to Wards 4A/4B from the ICU.

That evidence is found at Volume 15, Mr. Commissioner, page 2557.

Is that a view with which you agree, Dr. Izukawa?

A. Would you mind repeating that.

Q. I'm sorry. Dr. Rowe testified that, following Stephanie Lombardo's transfer to the cardiology wards, to Wards 4A/4B, from the ICU,



CC2

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

she suffered a rapid and dramatic decline in her medical condition.

A. Yes.

Q. He further testified that, at the time she died, in his view, the timing of her death was sudden and unexpected.

Would you agree with that as well?

A. It was sudden, yes.

Q. Doctor, I take it that, at the time she was transferred from the ICU - and to help you with that, from the Progress Notes, we see that she was released and transferred to the wards from the ICU during the afternoon on December 22nd. She died then in the early morning hours of December 23rd, and it is my understanding that you saw the child when she was in the ICU. Am I correct in that?

A. That is correct.

Q. At that time, doctor -- perhaps, to be fair, could I refer you to page 39 of the Progress Notes.

Do you have that, doctor?

A. Yes, I have.

Q. At page 39, doctor, we see a note which appears to have been made by Dr. Burns, and it sets out in some detail the perceived needs of



CC3

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Stephanie Lombardo at that stage prior to admission to Ward 4A, and it indicates that Dr. Burns discussed with you and with Dr. Trusler the need for a repeat shunt.

Do you recall having a discussion with Dr. Burns with respect to the merits of further corrective surgery for Stephanie Lombardo?

A. Yes, I do.

Q. Doctor, I take it that it was clear, while she was in the ICU, that no further corrective surgery could, in fact, be undertaken?

Am I correct in that?

A. This had been discussed with Dr. Trusler and he felt that the shunt that he had created at that time was the best that he could do under the circumstances, recognizing that the pulmonary arteries were small.

Q. I take it, then, that before she left the ICU for the ward, it was clear on the basis of Dr. Trusler's opinion, that no further corrective surgery could be planned for this patient at that stage? That was something that was known before she left the ICU?

A. That is correct.

Q. And, doctor, I take it as



CC4

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

well that if her situation had been in any way precarious while she was in the ICU, she would have remained there for close monitoring and would not have been transferred back to the ward? Would I be correct in that assumption?

A. That is correct.

Q. We know then, doctor, that she in in fact transferred to the ward and a matter of some several hours later she suffers a series of terminal events which both Dr. Rowe and yourself are prepared to describe as rapid and leading to a dramatic decline.

Dr. Rowe testified in his evidence before the Commission, Dr. Izukawa, that there were some cardiologists who felt that Stephanie Lombardo was at immediate risk without further surgery upon her transfer back to Ward 4A/4B and he suggested that you were one of those cardiologists who held that view.

Do you recall having had a discussion with Dr. Rowe expressing the opinion that Stephanie Lombardo was at some risk when she was transferred back to the cardiology ward?

A. I do not, but the fact that we had a discussion with Dr. Trusler would lead me to believe that her shunt was not adequate.



CC5

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Q. And Dr. Rowe also testified,

Dr. Izukawa, that the timing of Stephanie Lombardo's death and the nature and manner of the terminal events that she suffered, and their onset, were consistent with her anatomical and clinical condition.

Do you share that view?

A. Yes. I believe that we thought that the shunt might have closed because we were unable to hear a murmur at the time of the terminal events.

Q. We know, doctor, that at the time that the child was transferred out of the ICU back to Wards 4A/4B, she was on heparin therapy.

Am I correct in that?

A. That is correct.

Q. Would I be correct also in assuming, doctor, that the purpose of therapy with that drug was specifically to reduce the risk of occlusion of the shunt?

A. That is correct.

Q. And even in those circumstances, doctor, do I take it then that, in your view, the child's arrest and death were triggered by the closing of the shunt, notwithstanding that therapy had been undertaken to try to prevent that?



CC6

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

A. You will recall that, in the note, there is an indication that there was some difficulty controlling the dosage of heparin or the effect of heparin.

Q. I recognize that, doctor, and my question to you is that, in light of the terminal events that she suffered and your knowledge of the case, is it your view that her arrest and death were triggered by the closure, if you will, of the shunt?

A. That is all we thought at the time, yes.

Q. As well, doctor, Dr. Rowe testified with respect to Stephanie Lombardo, as he did with other children, that the particular terminal events that she suffered and the timing of their onset and the course which then ensued with these terminal events were all consistent, in his view, with digoxin intoxication, and I take it you agree with that as well?

A. That did not cross our mind because, as you have stated, she was not on digoxin at the time.

Q. Again, doctor, I recognize that, in the circumstances as they unfolded in December



1
CC7 2 of 1980, that might not have been a matter which then
3 occurred to you but, sitting here today, knowing what
4 you do about the circumstances surrounding this
5 child's death and the kind of terminal events that
6 she exhibited and the timing of her arrest, were those
7 terminal events and their pattern, in your view,
consistent with digoxin intoxication?

8 A. I would have to say, as I
9 stated before, since the findings are not specific
10 for digoxin intoxication, if you ask me that question
11 directly, I would have to say yes.

12 Q. But once again, doctor,
13 we have your evidence that those terminal events,
14 being non-specific, are not indicative, in your view,
of digoxin intoxication?

15 A. That is correct.

16 Q. Doctor, you told us that
17 you were aware that this child was not on digoxin
18 therapy at the Hospital. I take it you are aware
19 as well that in subsequent tests conducted on exhumed
20 tissues from her body by Mr. Cimbura at the Centre
21 of Forensic Sciences evidence of digoxin was found
in tissues from her body? Were you aware of that?

22 A. I had heard of that.

23 Q. Have you had occasion,
24
25



CC8

1

2

doctor, to review the medical records of this child?

3

A. Since that time?

4

Q. Yes.

5

A. Yes.

6

Q. Are you familiar then,

7

doctor, with the medications that were administered
to her during the resuscitation effort that was
undertaken?

9

A. I would have to look at

10

the list to be certain about that.

11

Q. Doctor, we know that in

12

this case, as in others, there is the list found at
page 43 of the medical record of the various steps

13

that were undertaken during the resuscitation of the

14

child, and it appears that a Code 25 was called at

15

approximately 3:51 a.m. If we look back to the

16

prior Progress Notes, and specifically the note of

17

Dr. - I think it is Dr. Rowe's note - it would appear

18

that no medications, other than the heparin therapy,

19

were prescribed or administered to this child from

20

7:00 p.m. on in the evening until the Code 25 was

21

called at 3:51 a.m.

22

Am I correct in that, doctor?

23

A. I don't see the note, I'm

24

sorry.

25



CC9

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Q. All right. The note of the various steps undertaken during the resuscitation is at page 43 of the medical record.

Do you have that?

A. Yes, I have it.

Q. That records the various steps and the timing of those steps during the resuscitation and the various drugs that were administered.

If you turn back to the Progress Notes, which immediately precede the description of the resuscitation, I am suggesting to you that it appears that, other than the heparin therapy, this child did not have prescribed for her any medication from approximately 7:00 p.m. in the evening of December 22 forward until the time of the Code 25 at 3:51.

Perhaps, doctor, if you look at page 41 of the Progress Notes.

A. Yes.

Q. The note which appears at the bottom of the page, the time is 1900 hours to 3:30 in the morning.

THE COMMISSIONER: Would it not be a lot better to have one of those reports on



CC10

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

medication, whatever they are called, if there is one in this --

MS. CRONK: The medication sheet for this child, Mr. Commissioner, appears at page 91 of the medical record.

THE COMMISSIONER: The child died when? What date?

MS. CRONK: December 23, in the early hours of the morning.

THE COMMISSIONER: Were there no medication sheets for the 22nd?

MS. CRONK: I have been unable to locate any, sir. That is why I was dealing with the Progress Notes.

THE COMMISSIONER: I see. All right. You were right, then.

MS. CRONK: Q. Dr. Izukawa, to help you, as the Commissioner points out, in the medication sheets in the medical record of the child there is an indication of the various medications that were prescribed and administered. The last note appears to have been made, unless I have missed a page, on December 20, but, if we turn to the Progress Notes themselves, and specifically the one which appears at the bottom of page 41 - do you have that,



CC11

1

2

doctor?

3

A. Yes.

4

Q. That is a note with a

5

time indication of 1900 hours through to 3:30 a.m.,

6

and it appears to read:

7

"Patient relatively stable. Heparin

8

infusing well. Patient feeding

9

eagerly..."

10

I believe it is one and a half to two ounces. Apex

11

rate is then described and it is described further as

12

being "regular". The respirations are noted to be

13

shallow but the patient is described as being in no

14

distress. The colour was pink. I have a little

15

difficulty reading the next word - I think it is

16

"dusky when upset, became restless after feeding,

17

however settled well", and then, at 3:30, "baby

18

became restless, breathing very shallow, apex irregular

19

and bradycardic. Placed on cardiac monitor."

20

I suggest to you, doctor, that,

21

on the basis of the Progress Notes, it does not appear

22

that any medications were prescribed or administered

23

to this child from 7:00 p.m. in the evening on the

24

22nd through until the time that the Code 25 was

25

called at approximately 3:51 in the morning.

A. That appears to be correct.



CC12

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Q. Doctor, with respect to the medications that were administered to her during her resuscitation, I take it that one of the purposes of having a detailed summary of the resuscitation efforts is to record in the summary all medications that were ordered by the attending doctors and administered to the child in an effort to successfully resuscitate the child once the Code 25 had been called? That is the purpose?

A. That is correct.

Q. Doctor, it has been suggested by a prior witness, Dr. Spielberg, who testified last week - this is found, Mr. Commissioner, in Volume 57 at page 2832 - that the digoxin found in the exhumed tissues of this child after death may have resulted from a medication error; that is, the accidental administration of digoxin to this child instead of either the right patient or instead of, alternatively, the right drug.

My question to you, Dr. Izukawa, is this: As Ward Chief at the time of this child's death, was any circumstance or fact brought to your attention by anyone on the ward or anyone involved in the resuscitation effort for this child which would lead you to conclude that a medication error had



CC13

1

2

occurred with respect to the child?

3

A. I was not informed of such.

4

Q. As Ward Chief, doctor, I

5

assume if such circumstances or facts were known to

6

exist, you would expect to have been informed of them

7

in your capacity as Ward Chief at the time?

8

A. That is correct.

9

Q. Doctor, can you help me

10

with this? In your experience on the cardiology

11

wards, do medication errors frequently occur during

resuscitation efforts?

12

A. When they are listed, as

13

they are in this example, it is unlikely, although I

cannot say that that is absolutely correct.

14

Q. I take it that it is

15

possible?

16

A. It is possible.

17

Q. But it is unlikely?

18

A. It is unlikely.

19

Q. Doctor, in your experience

20

on the cardiology wards - we know you have been there

21

for several years - was digoxin a drug which, in your

22

experience, was kept on the crash carts on Wards 4A/4B

during the period July 1980 through to March 1981?

23

A. I cannot answer that

24

25



ANGUS, STONEHOUSE & CO. LTD.
TORONTO, ONTARIO

Izukawa
dr.ex. (Cronk)

3261

1
CC14 2 specifically since I did not look after the carts
3 with the medications.

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

BmB.jc
DD

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Q Well, we know, Doctor, and I accept that fully. I recognize that internal to the Hospital there is in fact a resuscitation team that is called into action, if you will, with the calling of a Code 25 and I wasn't intending to suggest that you were part of that team.

A. Right.

Q But we also know on the basis of the cases that we have reviewed together today that in several instances where these children died you were the senior staff cardiologist on duty, you were contacted and in fact came into the Hospital either during the latter part of the arrest of the child or in time to pronounce the child dead?

A. Yes.

Q And based on the experience that you have had with those cases and I take it, Doctor, others, in your experience have you ever known digoxin to be a drug kept on the crash cart in those wards?

A. Not that I am aware of. It is not used during emergency procedures of that nature.

Q All right. It is not a drug that one would wish in the normal circumstances to use during resuscitation?



DD.2

1

2

A. That is correct.

3

4

Q. All right. Thank you, Doctor,
those are all my questions.

5

MS. CRONK: Thank you, sir.

6

THE COMMISSIONER: Mr. Roland?

7

EXAMINATION BY MR. ROLAND:

8

9

10

11

Q. Doctor, you told us that you
were a little surprised with the fact that there were
three cases in which you were called in at night
because of arrests being on duty at that time and
they occurred in rather short succession, I gather?

12

A. Yes.

13

Q. Am I correct in that?

14

A. Yes.

15

Q. That is what you told us?

16

A. That is correct, yes.

17

18

19

Q. Yes. And you were a little
surprised at being called in in the middle of the
night in those cases and that was not consistent with
your experience in the past, I gather?

20

A. Rather than the numbers it was
more of the timing, yes.

21

Q. I see.

22

A. It stood out in my mind.

23

Q. And in your experience at the

24

25



DD.3

1

2

Hospital do things occur from time to time in groups
or clusters?

3

4

A. Yes, they do.

5

Q. And, in particular, do deaths

from time to time occur in groups or clusters?

6

7

A. Yes, deaths and particular

types of malformations.

8

9

Q. And particular types of

malformations?

10

A. Yes.

11

Q. Yes. Did you perceive this as

a cluster of some sort at the time?

12

13

A. I did not specifically, no.

14

Q. Now, dealing with Baby Adamo,

you have been taken to page 34 of the chart where you

15

have noted digoxin therapy that was prescribed for

16

Baby Adamo earlier in the day. Do I understand from

17

your evidence that you simply took the opportunity

18

at the time of arrest to make a note about those

19

matters in the chart because you hadn't noted them

20

earlier in the day?

21

A. That is correct.

22

Q. And I take it by making a note

of the digoxin therapy for Baby Adamo at that time

23

you didn't intend to make any connection between that

24

25



DD.4

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

therapy and the death itself?

A. No.

MR. ROLAND: Thank you. Those are
all the questions I have.

THE COMMISSIONER: Thank you.

Miss Chown?

MS. CHOWN: No questions, thank you.

THE COMMISSIONER: Mr. Brown?

MR. BROWN: No questions, Mr.
Commissioner.

THE COMMISSIONER: Miss Forster?

MS. FORSTER: Thank you.

CROSS-EXAMINATION BY MS. FORSTER:

Q. Doctor, dealing with the case
of Stephanie Lombardo. Miss Cronk asked you I believe
whether in your opinion the terminal events or the
death was sudden and unexpected and you answered
'Sudden, yes'. Do I take it from your answer, sir,
that you did not regard this death as being unexpected?

A. Knowing that the child was
having difficulty with the lungs and also that she
was small and malnourished we weren't completely
surprised that there was a further difficulty than
was experienced during the day when she had the
pulmonary problem.



DD.5

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Q. And you also mentioned that you had a discussion with Dr. Trusler regarding the possibility of additional surgery on this child?

A. That wasn't myself, I was on duty over the weekend.

Q. Yes.

A. This had been discussed previously by Dr. Rose who was the ward chief at the time.

Q. But you personally did not partake in that discussion with Dr. Trusler?

A. No, I did not.

Q. Okay. Now, you also just mentioned to Mr. Roland that not only has it been your experience that deaths occur in clusters but also types of malformations. Are there any particular malformations that you found can occur in clusters?

A. Two examples that come to mind quickly: transpositions, for example, and hypoplastic left heart syndromes.

THE COMMISSIONER: I'm sorry, hypoplastic what?

THE WITNESS: Left heart syndromes.

MS. FORSTER: Q. And are there other malformations in addition to those two?

A. There are others that have been



DD.6

1

2

reported as occurring in clusters.

3

Q. And these are the two that come

4

to your mind immediately?

5

A. Yes.

6

Q. Are you able to explain why

7

these malformations occur in clusters?

8

A. There have been attempts made

9

but I don't think there are any good explanations

10

MS. FORSTER: I see. Thank you

11

very much, Doctor.

12

THE COMMISSIONER: Mr. Hunt?

13

CROSS-EXAMINATION BY MR. HUNT:

14

Q. Doctor, Baby Taylor died on

15

July 27th, 1980 in the early morning hours; Baby Dawson

16

died July 28th in the early morning hours, and Baby

17

Turner died August 1st in the early morning hours. You

18

were called in each night and it sticks out in your

19

mind because of the timing. Is that a fair summary

20

of your evidence?

21

A. Yes.

22

Q. And I take it it sticks out in

23

your mind because that sequence of events had never

24

happened to you before?

25

A. That is correct.



DD.7

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Q. Has it happened to you since?

A. There have been weekends when I have had to get up in the middle of the night.

Q. Have you ever had to go in three nights in a row?

A. Not three nights in a row, no.

MR. HUNT: All right, thank you.

THE COMMISSIONER: Mr. Young?

MR. YOUNG: Mr. Commissioner, I wonder if I might have the opportunity of a break to go over Dr. Izukawa's evidence?

THE COMMISSIONER: Yes, certainly, we will take 15 minutes.

--- Short recess

--- On resuming:

MS.CECCHETTO: Perhaps I could file that on behalf of the Attorney General.

THE COMMISSIONER: Yes, thank you.

MR. TOBIAS: Those are some written submissions on our behalf.

THE COMMISSIONER: Thank you.

MR. STRATHY: I have submissions as well, Mr. Commissioner, to file on behalf of my client.

THE COMMISSIONER: Yes, all right.

MR. STRATHY: It might be useful to



DD.8

1

2

you if one of us were to put together copies of the
authorities that we are all referring to.

3

4

THE COMMISSIONER: Well, I got a book
from Mr. Sopinka.

5

6

MR. BROWN: Yes, you have most of
those authorities from us.

7

8

THE COMMISSIONER: Well, you know, if
I could ask Miss Fineberg to do that, do you feel up
to doing that?

9

10

MS. FINEBERG: Yes.

11

12

THE COMMISSIONER: I have given a
copy of all of these to Miss Cronk. I take it every-
body has a copy of everybody else's submissions. Did
I say 10 days or 5 days for the answer?

13

14

15

MR. STRATHY: I think you said 10
days we have to reply.

16

17

18

19

20

THE COMMISSIONER: 10 days. Well,
the timing will be good because that means that they
will come in roughly at the same time and I can spend
Armistice day and the following days wallowing in the
law.

21

22

All right. Well then, can I just
pass all of these to you?

23

24

25

MS. FINEBERG: Yes.

THE COMMISSIONER: Okay, yes, Mr. Young?



DD.9

1

2

3

4

MR. YOUNG: I am grateful for the
opportunity of reviewing Dr. Izukawa's evidence but
we have no questions.

5

6

THE COMMISSIONER: Oh, good, all right.
I don't know why I say good. I don't mean to be
offensive.

7

8

MR. YOUNG: No offence taken.

9

THE COMMISSIONER: Yes. Miss McIntyre?

10

MS. MCINTYRE: Thank you.

11

CROSS-EXAMINATION BY MS. MCINTYRE:

12

13

14

15

Q. Doctor, just a couple of brief
questions. First of all, you have told us with
respect to David Taylor that you did review the
medications that had been given to this patient. I
am wondering what steps you undertook to review the
medications?

16

17

18

19

A. This was examining the orders
written by the physicians and then checking the nursing
medication sheet with the drugs that were actually
given.

20

21

22

Q. I take it then it was a paper
review, you did not go around and speak to the
individual staff members who had been involved in
giving the medications?

23

24

25

A. No, I did not do that.



DD.10

1

2

Q. Okay. And that is your standard method for reviewing medications given?

3

4

A. Yes, to see if errors could be detected from that examination.

5

6

Q. I see. My second question is with respect to your comment that you noted that it was unusual that you were called three times to an arrest in the early hours of the morning in a short period of time. Did you have any discussions with any members of the nursing staff with respect to the peculiarity of these events?

7

8

9

10

11

12

A. I believe I might have spoken briefly to the head nurse on the service night but only to see if she had any concerns about the individual cases.

13

14

15

Q. Okay.

16

17

A. I didn't discuss them as occurring at that particular time of the night.

18

19

Q. Were you aware that any members of the nursing staff had concerns about the deaths that were occurring on 4A/B?

20

21

A. Only in the sense that I thought the head nurse's reaction was appropriate.

22

23

Q. I see. Do you recall who the head nurse was?

24

25



DD.11

1

2

A. I believe it was Mrs. Trayner.

3

THE COMMISSIONER: Mrs. ... ?

4

THE WITNESS: Trayner.

5

THE COMMISSIONER: Mrs. Trayner.

6

MS. MCINTYRE: Q. With respect to

7

Stephanie Lombardo, you confirmed that this patient

8

was being administered heparin to ensure that this

9

shunt remained open, or at least to assist the shunt
in remaining open, is that correct?

10

A. That is correct.

11

Q. And that this patient was on

12

heparin up until the time of her arrest?

13

A. That is correct.

14

Q. I'm wondering if you could tell

15

us, Doctor, if the vial in which heparin comes is

16

similar to the ampule in which digoxin comes? Perhaps
if the witness could be shown Exhibit 224?

17

A. I'm sorry, I'm not familiar

18

with that. I have not made the comparisons.

19

Q. Well, I think we have the two

20

vials here, Doctor, and perhaps you could make the
comparison now.

21

MR. SHANAHAN: Mr. Commissioner, I

22

think the record should show though, as I think was

23

developed in testimony the other day, that in fairness

24

25



DD.12

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

the vials, as I understood it, of heparin, are the vials of heparin as they now are but I thought in evidence that was given to me that the witness indicated, Dr. Spielberg, that he couldn't say that the vials of heparin that are now there as exhibits are heparin as was contained in vials during the time period that we are concerned with. So, really, the question doesn't have a great deal of merit about our time period; if I am right there.

MS. CRONK: That is my recollection of the evidence.

MR. ROLAND: And in any event, Mr. Commissioner, I recall that evidence as well, it seems little use to ask this witness who says he doesn't know himself and the vials we can all look at at our own leisure and decide whether they are similar or not. So that why you should ask this witness that is beyond me.

THE COMMISSIONER: You've got everybody against you, Miss McIntyre.

MS. MCINTYRE: So it would seem, Mr. Commissioner. I will not pursue that question.

Q Doctor, you indicated to Miss Cronk that you thought a medication error during the arrest procedure was unlikely. Have you conducted any



DD.13

1

2

3

4

5

independent review or had a review conducted by an independent observer of medications given during arrest to determine if they are in fact correctly given?

6

A. No.

7

8

Q. Is there any research being done at the Hospital?

9

10

11

12

13

A. Well, no, I haven't done that personally. I am merely speaking from the fact that there is one nurse assigned to recording and looking after the medications. So that the opportunity to make errors would be reduced. But I have not done a study of that.

14

15

16

Q. I'm sorry, Doctor, I don't understand. You are saying that the nurse who is writing down the medications, that would lessen the possibility of errors?

17

18

A. There is one person who is recording the medications given.

19

20

21

Q. Well, presumably that would prevent errors in what is written down but I would suggest that that would not ensure that what in fact was written down was what was given.

22

23

24

25

A. As I say, I haven't done a study on this, so, I can't answer your question.



DD.14

1

2

3

MS. McINTYRE: Okay, thank you very
much. I have no further questions.

4

THE COMMISSIONER: Thank you. Mr.
Knazan?

5

CROSS-EXAMINATION BY MR. KNAZAN:

6

7

Q. Doctor, I represent Marianna
Christie, a registered nursing assistant on Wards 4A
and 4B.

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25



EE
DM/cr

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

I may have lost the thread over lunch, but am I correct that it was your opinion that Amber Dawson's death was satisfactorily explained by her clinical status?

A. Yes, that is what I said.

Q. So you would disagree with the opinion that it was inconsistent with her clinical death, obviously.

A. Are you quoting Dr. Cutz' report, I'm not quite certain where this came from.

Q. I was not quoting Dr. Cutz, I was quoting Dr. Nadas, I believe, who is the consultant cardiologist to the Atlanta Report.

A. Well I am not familiar with his report.

Q. Is it correct that if you felt that clinical events and autopsies satisfactorily explained the death, that you would disagree with an opinion that it was inconsistent with the death?

A. I don't know his report.

Q. No, but before knowing whose report it is, is it not correct that you disagree with the conclusion ---

THE COMMISSIONER: I think that that follows.



1

2

MR. KNAZAN: All right.

3

4

5

6

MR. KNAZAN: Yes.

7

8

Q. So you are a paediatric
cardiologist?

9

A. I am.

10

11

Q. Do you know personally or
by reputation, Dr. Nadas?

12

A. Yes, I do.

13

14

15

Q. Is there any reason to
believe that he on the basis of examining the child's
record and the autopsy report would be in any better
position than you to give an opinion as to the ---

16

17

18

A. Well only in the sense that
we were closer to the patient than he was, he is doing
a retrospective study.

19

20

Q. And you would say you were in a
better position, do you agree with that?

21

A. Keeping - bearing in
mind his reputation I still feel comfortable.

22

MR. KNAZAN: Thank you.

23

24

25

THE COMMISSIONER: Mr. Olah.



1
2 MR. OLAH: Mr. Commissioner, in this
3 case I have been indulged by my friends and they
4 will examine before I will and I am hoping that that
5 way I will have no questions.

6 THE COMMISSIONER: Yes, all right.
7 Mr. Labow.

8 CROSS-EXAMINATION BY MR. LABOW:

9 Q. My name is Stephen Labow and
10 I represent the parents of a number of children that
11 you were dealing with.

12 Doctor, you were the ward chief when
13 Real Gosselin died, is that right?

14 A. That is correct.

15 Q. And you told Miss Cronk that
16 you did not have any reason to believe that digoxin
17 intoxication was involved at the time of his death?

18 A. I believe I said that I
19 didn't think it was necessarily the cause of death, at
20 least that is the interpretation I put on the question.

21 Q. Well, did you feel that
22 digoxin might have played a part in this death?

23 A. We knew that he had a level
24 of 3.9 nanograms per ml which places it in the zone
25 between what one would consider definite intoxication
and therapeutic level.



1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Q. Did you look into that aspect of this child's death?

A. We knew the level, that is why we withheld the digoxin.

Q. This child was admitted to the Hospital on the 17th of December, and my understanding from the Hospital record is that you did the original consultation?

A. That is correct.

Q. And the child died a day later?

A. The early morning, yes.

Q. In the early morning?

A. Yes.

Q. Now you knew the level was 3.9, which is a level that could conceivably be higher than therapeutic?

A. That is correct.

Q. Did you look into it to see if that was possibly the cause of death?

A. Well, as I said we took steps by stopping the digoxin.

Q. I understand that. But the child died within a day of admission.

A. We said that we felt his



1
2 clinical condition explained adequately the reason
3 for his death.

4 Q. But you didn't feel it was
5 necessary - I am sorry, continue.

6 A. And we had dealt with the
7 problem of the rather higher than therapeutic, ideal
8 therapeutic level of digoxin before this question of
9 his terminal event came up.

10 Q. Now I understand that his
11 death was consistent with his clinical condition;
12 but we have also discussed the fact that his death
13 was equally consistent with, I would put to you, with
14 digoxin intoxication?

15 A. If you are asking which I
16 felt was primary, I will put his clinical condition as
17 the primary cause.

18 Q. Can you know that?

19 A. But I cannot definitely
20 exclude digoxin as a possibility on the grounds, as
21 I stated time and again, that the symptoms and signs
22 are not specific for digoxin toxicity.

23 Q. And the additional factor
24 that in this case the last ante mortem level was almost
25 4?

A. And I said that we dealt with



1

2

that situation by not giving any further digoxin.

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Q. Well my question, Doctor,

is I understand you stopped giving digoxin to the
child, you didn't stop for very long because the
child died very soon after admission.

A. If you don't consider the
child as being toxic, speaking because of lack of other
signs and symptoms at the time when you stop the digoxin,
we did this as a precaution. As I said there was
no indication that we felt that was a toxic level, it
is between the level of therapeutic and toxic.

Q. So on admission you did
not think that this child was toxic?

A. That is correct, not on the
basis of the level alone.

Q. Aside from the levels,
Doctor, my review of the chart shows that some of the
symptoms discovered over the day were arrhythmias,
bradycardia, vomiting and increased lethargy, are
these not symptoms of digoxin intoxication?

A. Those are equally the
symptoms of congestive heart failure. I believe you
are quoting the events that occurred towards the
terminal events, am I not correct?

Q. I am quoting the symptoms



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

that occurred at 1900 hours on the 17th of December
between 1900 hours and 2000 hours.

A. May I interrupt?

Q. Yes.

A. That was a nursing person's
note, is that correct?

Q. No, the first note was a
note of Dr. Stephens found at page 44 of the Hospital
record.

A. May I see the record please?

MR. LABOW: It is Exhibit 72, Gosselin.

THE COMMISSIONER: I am sorry, what
page did you say, Mr. Labow, what page?

MR. LABOW: It is page 44, Mr.
Commissioner.

Q. Do you have that data?

A. Yes, I have.

Q. That is Dr. Stephens' note.
My understanding is that was Dr. Stephens, that
scribbled signature about two-thirds of the way down
the page on the right?

A. That is correct.

Q. Now, he says he was called
to see the child because of apnea; the child was
bradycardic; the child was lethargic and he refers to



1

2

3.9 level. He then goes on to say in the middle of
the very middle of his note:

3

4

"Will try lasix if fails to improve
discuss digoxin issue."

5

6

Now that was 7:00 p.m. on the 17th
of December.

7

8

A. I would also quote the last
line of his note where he states that:

9

10

"Appears more likely to be cardiac
failure."

11

12

And it is on that basis that he gave the lasix. He
made his diagnosis that this was the same.

13

Q. I am sorry.

14

A. This is the same note.

15

"Appears much more likely to be cardiac
failure."

16

Q. Right.

17

A. And on that basis he gave the
child lasix.

18

19

Q. Correct. Now this was 7:00
p.m. on the 17th?

20

21

A. Yes.

22

Q. Is that correct?

23

A. That is correct.

24

Q. And the child died at 3:30

25



1

2

the following morning.

3

4

5

THE COMMISSIONER: I wonder if I
could just sort of make some sense out of the last
one, what is the line before:

6

7

"May have to R/O ..." What is
that, "at some point".

8

9

10

MS. CRONK: Re-open.

11

12

13

14

THE COMMISSIONER: Is that re-open?
MS. CRONK: That is just my guess,
sir.

THE WITNESS: I would imagine that to
be "Rule-out". I am not sure about that. I am not
sure about that, I am not sure what the next word
is.

15

16

17

THE COMMISSIONER: "...at some point
although much more likely to be cardiac failure..."

MS. CRONK: I think that is "Rule-out
sepsis" sir.

18

19

20

21

22

THE WITNESS: Oh yes, correct.

THE COMMISSIONER: Rule-out sepsis
at some point". Really I think that the "cardiac
failure" is opposed to the sepsis not to digoxin I
think.

23

24

25

THE WITNESS: That is the way I would
interpret that note, sir.



1

2

3

THE COMMISSIONER: "Need careful
monitoring".

4

MR. LABOW: Q. All I am putting to
you, Doctor, ---

5

6

7

8

A. I would also quote the next
page, where, the middle of the page where he mentions
that the child "voided 102 cc", that is small, and
therefore he did respond to lasix.

9

10

11

12

Q. Doctor, all I am trying to
do, all I am asking you is if there was a concern at
7:00 p.m. on the 17th of December, there was some
concern about the digoxin level, is that correct?

13

14

15

A. That is correct.

16

17

18

19

20

Q. And the child exhibited
symptoms that could have indicated digoxin intoxication
or congestive heart failure.

21

22

23

24

25

A. Digoxin was discontinued
two doses were not given in the morning and in the
evening, and that we felt would be sufficient until
the next day when we could take a digoxin level. This
would be consistent with our treatment.

Q. Did you intend to take a
level on the 18th?

A. Yes, we would have done.

Q. My question is, why did you



1
2 not take a level when the child died to see whether
3 digoxin had played a part in the death?

11 4 A. Because as I said we thought,
5 we felt we dealt with the problem and there was in
6 our mind no question that we felt the reasons for the
7 cause of his death.

8 Q. So even though you had
9 expressed concern the day before, you didn't think there
10 was a possibility that this could be digoxin toxicity?

11 A. This was a concern expressed
12 by the resident which is proper. He also mentions
13 sepsis, he also mentioned congestive heart failure,
14 and I think he is doing a good job of looking after the
15 possible problems that might arise with the patient.
Our opinion was that we had dealt with that situation.

16 Q. And you didn't think there
17 was any need to check it at autopsy, to rule it out
18 completely?

19 A. Well, the reason why we
20 would check it out at autopsy is if we felt there was
21 something odd about the dosage that had been given;
22 that as I mentioned previously although the level was
23 slightly higher than we would have administered our-
24 selves it was not outside the level of the limits that
25 other centres would have given for a digitalizing dose.

- - - -



F/DP/ak

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Q. Doctor, we have heard a lot about the range that a child can have, the range of levels that would fall into therapeutic level, and we have also heard a lot about the fact that different levels might react differently with different children. In other words, a child at one level may react differently than a child at another level.

A. That is why we rely on our clinical judgment as well, which we used at that time.

Q. So your clinical judgment was, notwithstanding the symptoms shown and the relatively high level on admission, this was not something that you considered could be a cause of the death of this child.

A. We considered it, as you will note from Dr. Steven's note --

Q. The resident considered it?

A. Well, he would have discussed it with me. We felt that the clinical condition was such that it did explain the death of the child.

Q. But you did not want to insure that you could rule out digoxin. That is my question.

A. We were not in the habit of



1

2

ordering postmortem digoxin levels at that time.

3

Q. I understand.

4

A. This was not our standard

5

practice.

6

Q. I am not really asking about

7

your standard practice. I am asking you about your
practice in relation to this child.

8

A. I can only go by what we were

9

in the practice of doing at the time.

10

Q. Doctor, I would like to turn

11

to Philip Turner, it is Exhibit 44 of the Hospital
record.

12

13

You have told Miss Cronk that you

14

were on call, and this child went into arrest, and
you came into the Hosiptal. Is that correct?

15

A. That is correct, yes.

16

Q. And this was the third of

17

the three where you were called late at night -
early in the morning.

18

19

A. That is correct.

20

Q. You don't recall if you

21

reviewed the medication for this child? Is that
your understanding?

22

A. I don't recall specifically that

23

I did. At least I had not written anything in the
note to that extent.

24

25

FF2



FF3

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Q. Do you recall what you did when you came in? Your note is at page 52. Your note has the time as 2:30 AM. Was that when you arrived at the Hospital?

A. That may be, yes.

Q. Do you recall when you arrived at the Hospital?

A. I don't.

Q. Was the child already dead, when you arrived?

A. I would presume that the residents were carrying out resuscitation at that time.

Q. But you don't recall or --

A. Not specifically, no.

THE COMMISSIONER: I would think - arrested at 1:30 a.m. and you made your note at 2:30 a.m. but that does not mean that you arrived at that time.

THE WITNESS: No, that does not, sir.



1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

FF4

MR. LABOW: Q. At the very bottom of the page of Nurse Nelles' note it seems to indicate that the child was pronounced dead by you at 2:15.

A. As I say, I may have arrived while they were carrying out the resuscitation.

Q. You put into your note that the the cardiac status appeared controlled?

A. That is correct.

Q. Did you check the Hospital record to determine that or did you talk to the doctors and nurses?

A. I would have discussed it with the Fellow and the resident.

Q. Do you recall who you discussed it with?

A. Not specifically, no.

Q. Did you know when you arrived that this child had only been transferred from the Intensive Care Unit to the Floor on the 30th of July?

A. I believe I would have, yes.

Q. Did you know that on a note



FF5

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

on page 49 of the record, I think it is Dr. Soulioti, pointed out that there were episodes of sinus bradycardia and digoxin was not always given although the level was only .5.

A. What I recall of the patient was that digoxin had been started in the Intensive Care area and that there were, in the postoperative period, episodes of abnormal rhythm and his heart did slow down when the physiotherapists were working with the child, and also there was potassium instability, so that the digoxin level was monitored very carefully and we knew that these problems were occurring.

Q. And you knew by going through the record prior to coming here that digoxin had been held quite frequently with regard to this child.

A. Because of the transient rhythm disturbances that occurred, but in light of the levels that were obtained we felt that this was not specifically due to digoxin.

Q. Now, none of the levels received on this child were greater than 2, by my review of this Hospital record.

A. That is correct.

Q. Does that mean that this child



FF6

1

2

could not possibly have been having some kind of
reaction to digoxin?

4

A. Not toxic reactions.

5

6

Q. What I'm asking is, is it
impossible that this child was reacting to the
digoxin notwithstanding the fact the levels were not
in the toxic range?

8

9

A. In my experience the rhythm
disturbances that are seen occur only with the toxic
levels.

10

11

12

Q. So the rhythm disturbances
that were seen with this child --

13

14

A. Were, I believe, part of the
natural course of the disease.

15

16

Q. Were they similar to the
same kind of rhythm disturbances that you would
have seen if this child had reached toxic levels?

17

18

19

A. The types of disturbances
could be - as I said, there was not anything specific
about the rhythms that we see.

20

21

Q. You don't recall who you spoke
to when you --

22

A. Not specifically, no.

23

24

25

Q. Could you turn to page 152,
if you can find it. It is right in the midst of the



FF7

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

ICU reports. There is one handwritten page, it is a little difficult to follow the numbers in this record.

A. 152?

Q. 152.

THE COMMISSIONER: I have several in this book, several totally blank pages. I don't know what purpose they serve.

MR. LABOW: I do not know either, Mr. Commissioner. It is very difficult to find your way through the ICU reports which are the ones that are vertical, but somewhere in the middle of those reports is a handwritten page.

THE COMMISSIONER: Which is numbered 152?

MR. LABOW: Which is numbered 152.

THE COMMISSIONER: All right.

THE WITNESS: Yes, I have it.

MR. LABOW: Q. Now, that page is apparently two notes written by Nurse Nelles which sets out the parents' names and the child's name, family doctor, et cetera, the date of death, and then in block letters, in large letters all alone is a note saying "Digoxin".

THE COMMISSIONER: Do we know that



FF8

1

2

that is Miss Nelles' --

3

MR. LABOW: Apparently. I don't

4

know, sir.

5

Q. Do you recall speaking to

6

Nurse Nelles at all?

7

A. No, I do not.

8

Q. Do you have any idea what this

note means?

9

A. No, I do not.

10

Q. Doctor, I would like to turn

11

to Matthew Lutes, Exhibit 69.

12

A. I should mention that I did

13

not look after this child.

14

Q. I am only going to ask you,

15

this child was apparently referred to you from

16

Sault Ste. Marie.

17

A. I was the physician who had

18

the child admitted.

19

Q. That was your only contact

with this child?

20

A. That is correct.

21

Q. Then we definitely do not have

22

to look at the record, my question is a general one.

23

As the physician to whom this child
was referred would you not follow its progress along?

24

25



1

2

FF9

3

A. Not in detail. I would be
told about the child.

4

5

6

7

8

Q. In this case there is a letter
from Dr. Jedeikin that he apparently wrote for you,
discussing the catheter study that was done but
other than that I don't see any actual contact that
you had with this child?

9

A. That is correct.

10

11

Q. Did you, when the child died,
did you write a note to the doctor who referred the
case to you?

12

13

A. I don't recall without looking
at the chart.

14

15

16

Q. Would you normally routinely
write a letter to the doctor who referred a case to
you from out of town?

17

18

A. I would be given the discharge
summary and on that I would write a note to the
referring physician, yes.

19

20

Q. Would that normally be in the
Hospital record, that letter?

21

A. Not necessarily.

22

Q. Where would it normally go?

23

A. To the referring physician.

24

Q. You would not keep a copy and

25



FF10

1

2

put it into the Hospital record?

3

A. Not necessarily, no.

4

Q. In this case, if we have the

5

complete record, then it did not appear in this

6

Hospital record. If I am correct in saying that

7

this was referred to you and assuming that you

8

wrote a letter, although I've never seen it, who do

9

you discuss these matters with before you write such
a note?

10

A. I would look at the discharge

11

summary and the file.

12

Q. Would you review the chart

13

carefully?

14

A. Not necessarily in detail,

15

no.

16

Q. Would you talk to any of the

17

doctors who were treating the child?

18

A. I may not in every case, no.

19

Q. You don't recall with this

child?

20

A. No, I don't.

21

Q. The last child I would like to

22

look at is Barbara Gionas. You were apparently the

23

staff physician for this child?

24

A. I was the referring physician.

25



FF11

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Q. Could you turn to page 20.

According to the death report the referring physician
was Dr. Trusler and you were the staff physician.
Is that incorrect?

A. It should be the other way
around.

Q. It should be the other way
around.

A. Dr. Trusler is the staff
physician in that case.

Q. You did the cardiac consulta-
tion to this child, found at page 79?

A. This was in Ward 7G, is that
correct?

Q. This was in Ward 7G?

A. Yes.



1

lnov832

GG

BMcra 3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Q. Doctor, after doing that consultation, did you follow up this child at all?

A. I see that I was involved in the cardiac catheterization.

Q. Yes, you were involved in the cardiac catheterization, the first one.

A. Right. Then the child would have gone to surgery and after that would have been taken over by Dr. Fowler I believe who was on 4A or 4B.

Q. And you had no further direct contact with this child?

A. No.

Q. None whatsoever?

A. No.

MR. LABOW: I have no further questions.

THE COMMISSIONER: Yes, all right. Are you all right for tomorrow, doctor?

MR. SHANAHAN: Mr. Commissioner, I am next and I won't be here in the morning. I wonder if I could ask everyone's indulgence if I could ask my questions now.

THE COMMISSIONER: Yes, go ahead. I am answering for everybody, no, that's fine.



GG2

1

2

CROSS-EXAMINATION BY MR. SHANAHAN:

3

Q. Doctor, my name is

4

Shanahan and I act for the families of the Lombardo
and Dawson children.

5

6

A. Yes.

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

A. This is the morning meeting?

Q. The morning meeting, right.

A. Yes.

Q. Doctor, I want to take issue

with some of the things you mentioned. First of all,
you said the child was small and malnourished and I
think you indicated had a pulmonary problem. Well,
first of all, I checked out the baby's weight which
was 2500 grams. I think we would be looking at,
both of us here would be looking at Exhibit 78, just
to assist you here.

A. I'm sorry, I must have been
talking about a different child. The weight I have
recorded is 2430 grams at birth.

Q. Well, I've got here at birth



GG3

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

on page 3 of that exhibit, if you have it, that would be Exhibit 78, 2500 grams, which would be that child's weight. If I recollect, if I recollect Dr. Rowe's evidence that was the cutoff mark for, well, let me put it this way, babies under 2500 grams he would have considered to be premature.

A. Yes, that's correct.

Q. All right. Second of all, sir, you said that child was malnourished but I think the evidence here shows, and the record here shows that this child is a child that takes to its feed well, that was being fed orally as opposed to any tubes and was being fed full-strength formula. So, let's start here and I'm going to show you where I saw that. Page 19, if you would, sir.

A. Right.

Q. I'm sorry, yes, page 18 is where it actually starts.

A. Yes.

Q. Page 18 is a discharge report prepared, and we will come back to that for other evidence but right now for this point only is prepared by Dr. Halpern and there is a short sentence in the second paragraph from the bottom where it says:

"The child was on no medication



GG4

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

apart from the heparin and was
fed orally."

Then on page 40, sir, we've got
an indication here around the middle of the page where
you see a set of numbers, 1, 2, 3, 4. The first one
says, "Patient very hungry and to feed at lib.". I
take it whenever the child wants it, is that right?

A. Right. I stand corrected.
I might have been talking about another patient, I'm
sorry.

Q. Just to complete that.
Down below there, nutrition, in the handwriting of
someone else says, "Taking formula well", and
Susan Nelles' notes on the last point -- I'm sorry,
not Susan Nelles, Nurse Nasan, and that would be on
page 41, indicated that the child was feeding eagerly.
So, is that point clear, sir, that this child has had
no difficulty with its feeding and is feeding orally
on full-strength formula?

A. Yes, I stand corrected.

Q. All right, sir. Now, in
terms of the shunt operation, sir, it seemed to be that
you implied that that operation wasn't a success. Well,
first of all, on page 36 of those notes that you have
in front of you I believe Dr. Trusler's notes with



GG5

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

respect to the operation itself -- do you have that
page located, sir?

A. 36?

Q. Yes, sir. Do you have that,
sir, at the bottom?

A. Yes.

Q. All right. There is a lot
of interpretation needed here but it seems to be that
it is a tetralogy of Fallot and "PS" would be
pulmonary stenosis. Am I right there? I could be
wrong. In any event, they put a shunt, a pulmonary
artery window is what I think they are putting in
there. Is that right? Is that how it is described?

A. That is correct.

Q. And then there is a notation
that the "pO" immediately goes from 22 to 47, and we
have heard evidence from a number of doctors, starting
with Dr. Rowe, that that was an immediate increase in
the pO₂ reading and that that was an excellent sign.

A. However, the size of the
shunt that is indicated, 2.5 mm., is small.

Q. I am going to get to that,
sir, but you will agree that regardless that operation
right at the outset seems to have provided the benefit
to Stephanie Lombardo?



GG6

1

2

A. The immediate response, yes.

3

Q. All right. In terms of there

4

being problems, in the top of the following page is

5

a nursing note about this child when she is admitted

6

to ICU and on the second line it says, "There was a

7

shunt today with no intra-op problems". That seems

8

to be the nurse's feeling towards this operation on

the day she receives the child. Do you see that, sir?

9

A. Yes. Yes, I do.

10

Q. Now, turning to page 75,

11

sir, finally again is a typed report by Dr. Painvin

12

who I gather from reading must have been present at

13

this operation here.

14

To shorten it down, sir, under the

15

heading "Operative Procedure" here -- do you have

16

that paragraph located, sir?

17

A. Yes.

18

Q. All right. The initial

19

part is about the patient being prepped and draped

and what have you:

20

"The size of the main P.A. was..."

21

I'm looking there at about line 3.

22

A. Yes.

23

Q. I take it the size of the

24

main pulmonary artery was 4 mm. in diameter.

25



GG7

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

"The size was too small to work with a prosthetic graft as we had expected to do. So we decided to do a window between the ascending aorta and the P.A. We did it in the usual way, and the lumen of this window was 2.5 mm. and we noticed..."

This is something we have just looked at.

"...we noticed an improvement in the systemic $\bar{p}O_2$ rising from 27 to 47."

The next sentence, I will just go right to the end of it, the closeup and what have you and then concludes:

"...the patient was closed in the usual manner."

And then jumping to the next sentence:

"She was sent to the ICU in good hemodynamic status."

And then the last sentence, sir, is the summary about the whole operation:

"She underwent this operation without problems."

Sir, I am putting to you the very



1
GG 2 fact that she was considered for an operation in itself
3 was a sign that she wasn't going to be subject to any
4 heroic surgery, that she was a fit candidate for this
5 type of operation. Isn't that right, sir?

6 A. This was done with the
7 knowledge that the pulmonary arteries were small. The
8 shunt would have been put into one of the branches
9 ordinarily if they had been large enough and this
10 indicates that in fact this was a severe lesion, that
11 he was unable to utilize the branches themselves and
12 had to resort to putting the shunt into the main
13 pulmonary artery, which means to us that this was
14 an operation that was done realizing that it was not
15 an extreme measure but a measure that would not normally
16 be done.
17
18
19
20
21
22
23
24
25



GG(2)

2

1

2

Q. Well, I know that one, sir.

3

Let's look at page 38, the page before it, Dr.

4

Jedeikin's note. Now, to my mind, if there was ever

5

a note that sums up this child is doing well, and it

6

strikes me that the mere transfer from ICU to the ward

7

is indicative of the fact that she is doing well,

8

look at the note of Dr. Jedeikin on page 38. It says

9

here that she is stable and 40 per cent O2. pO2 is

10

in the 40's. UO - I take it that has something to

do with the air entry?

11

A. I think in other words we are

12

saying that it is the experience of Dr. Jedeikin or

13

Dr. Burns' superior and I would have to say that

14

Dr. Burns' opinion is superior. She was ready for

15

a consultant position at that time and since we did

16

discuss the situation with Dr. Trusler there was

concern.

17

Q. Well, all right, if you would

18

just bear with me for a moment:

19

"Colour - pink, dusky when cries. No
distress."

20

Dropping down in that note again:

21

"Child's colour and pO2 is up, so,

22

one must assume reasonable shunt

23

function."

24

25



GG(2)

1

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Q Well, all right. First of all she is a fit candidate to have it done. Certainly there isn't an air of hopelessness about Stephanie Lombardo's case as you approach putting in this shunt?

A That is correct, at that time.

Q All right.

A But then the situation changed during the surgery and in the post-op period.

Q All right. Now, in the surgery here we have Dr. Trusler's notes about the immediate rise in the pO₂; we have the description here of the operation and that description itself says that the operation that was done, although not the one that was immediately planned for, was done in the usual manner?

A That is a temporary improvement. I would quote from the same page that Miss Cronk quoted from that there was some concern before the child was transferred to the ward whether this shunt was large enough.

Q Well, all right. If I may, just a moment and I realize to everybody that it is a late hour here.

A That is on page 39, the top paragraph.



GG(2)

3

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

That thing about nutrition, starting on full strength formula today and then down at the bottom, must be a candidate here for transfer to the ward.

I would suggest to you, sir, that in fact the feeling was that the heparin itself would manage any further problems that young Lombardo was going to have after this shunt operation?

A. I don't agree with that.

Q. All right. Because she did not have a continuous murmur at that time, she only had an injection murmur which, in the usual situation indicates to us that the shunt is not as large as one would wish the shunt to be and anatomically we were told that the shunt size was small.

Q. All right. She did have a systolic murmur, no question about that.

A. Yes.

Q. All right. Now, as well as that, sir, wasn't her breathing good enough that she was finally taken off the oxygen mask? That is on page 40. Page 40 there of the notes indicates under Colour at the bottom part there where the handwriting is different:

"Colour - pink in 40 per cent O2,



GG(2)

4

1

2

"no change in colour when out of

3

02 ... "

4

I take it when out of the mask.

5

"O2 now discontinued."

6

That was discontinued I think the day before her death. So, she is now breathing room air. Am I right there?

8

A. That is correct.

9

Q. Sir, the final thing then

10

about Lombardo here, on page 18 of this report we

11

looked at earlier, that is, the discharge report here,

12

the first paragraph, sir, the last sentence:

13

"In view of stable pO2's it was

14

however ... "

15

And I take it, sir, sorry to interrupt, I take it that the doctor is sort of summing up the whole

16

course of this child here and he says:

17

"In view of stable pO2's it was

18

however decided not to re-operate

19

on the child in order to rule out

20

shunt closure and on the other hand

21

a continuous heparin infusion was

22

started to limit the risks of

23

thrombosis of the shunt."

24

I might say, sir, just looking at

25



GG(2)

5

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

that next paragraph, I circled here and, again, due to the lateness of the hour I don't think it is worth going into but there was so many signs here, normal heart sounds, pulses are normal, good air entry, abdomen is soft, liver palpable and, on the next line of the next paragraph, her electrolytes were normal.

Sir, I would suggest to you here that in fact the reason she is not re-operated on is not because of any difficulties that might have been seen when she was actually opened up but she is not re-operated on because of the fact that it was felt that the heparin infusion can meet any difficulties?

A. I don't accept that because from the beginning, realizing that the shunt was not ideal in size and having discussed in Intensive Care before the child was transferred, we felt that it may be that the shunt was not adequate.

Q. Why is she not on digoxin, sir?

A. She was not in heart failure.

Q. I see. Well, would that in itself not be a good sign, sir?

A. It is not because in this situation this is a question of adequate flow to the lungs.



GG(2)

6

1

2

Q. All right.

3

A. And not too much flow.

4

Q. Would digoxin be contra-
indicated?

5

6

A. Not necessarily. There are
shunts that may be too large and in that situation if
the heart is overloaded we would start digoxin.

7

8

Q. So, she is not on digoxin
because she is not in heart failure but it is not
contra-indicated because of what again?

10

11

A. What was your original question?

12

Q. Well, I put to you why she is
not on digoxin and you say well, she is not in heart
failure.

13

14

A. She is not in heart failure.
We didn't feel the shunt was large. In fact, we were
concerned that the shunt may not be large enough.

15

16

17

Q. All right. And then I say to
you, well, is digoxin contra-indicated and you say
to me no, and then you go on to answer there. Can
you give me that again?

20

21

A. Well, you asked the question
clearly is digoxin contra-indicated in this situation
and I say no.

22

23

Q. It isn't?

24

25



GG(2)

7

1

2

A. No. There is no reason to give

3

it.

4

THE COMMISSIONER: Would it do harm?

5

THE WITNESS: I wouldn't give digoxin

6

without having a good indication.

7

MR. SHANAHAN: No, but that is not

8

the question I asked.

9

THE COMMISSIONER: I think the question

10

that Mr. Shanahan is trying to discover is, would it

11

be a mistake to order digoxin, that is, would digoxin

do more harm than good?

12

THE WITNESS: Well, as you know, the

13

digoxin has side effects which we must be careful of.

14

THE COMMISSIONER: They seem to

increase the beating of the heart.

15

THE WITNESS: It tends to slow the

16

heart.

17

THE COMMISSIONER: I'm sorry, to slow

18

it down, yes. In this particular case the heart, the

19

beat was appropriate.

20

THE WITNESS: Yes.

21

22

23

24

25



lnov83 2
HH
DMra 3

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

THE COMMISSIONER: If it tends
to slow it down, would it not be doing damage to the
heart?

THE WITNESS: If excess is given,
yes.

THE COMMISSIONER: If what?

THE WITNESS: If excess is given.

THE COMMISSIONER: Wouldn't any
be given at all? I'm sorry, perhaps I don't under-
stand digoxin. If the tendency is to slow down the
beating of the heart, that would slow down the pumping
of oxygen to the lungs, pumping of blood to the lungs?

THE WITNESS: If the heart rate
is slowed down excessively, yes, that is correct.

MR. SHANAHAN: Q. That is where
I was headed here.

I am putting to you, sir, that even
in normal use of digoxin with a child like Lombardo,
what would normally be we will say a therapeutic
dose, this child may well, given her condition and
the operation that she had undergone, may well be hyper-
sensitive, if you like, to the effects of digoxin?

A. I don't see why the question
of digoxin arises in this case, because we didn't
think it was indicated.



1
HH2 2 Q. I will tell you why it
3 arises, sir. It arises because Dr. Cimbura has
4 found digoxin in her exhumed tissue, and she wasn't
5 supposed to be on it.

6 So, my question to you, sir, is
7 that if she had even a therapeutic dose, given
8 her malformation and the shunt operation, she could
9 be, as I say, hypersensitive even to a therapeutic
dose.

10 A. When you say hypersensitive
11 in the sense there is a reaction beyond expected
12 limits?

13 Q. That is right.

14 A. I don't see how one can
15 determine that unless the child had been given
digoxin.

16 Q. You felt, sir, finally
17 that the shunt had closed and yet, you know, the
18 parents didn't consent to an autopsy.

19 A. Yes.

20 Q. And we certainly have seen
21 at least one other case that I can recollect where
22 it was felt the shunt had closed and the autopsy
revealed that indeed the shunt had not closed.

23 Did you ever think of notifying the
24
25



1
HH3 2 Coroner to circumvent perhaps the parents' unwilling-
3 ness to have an autopsy?

4 A. We felt that the child's
5 general disease was sufficiently severe that we were
6 not surprised that death occurred at that particular
7 time.

8 Q. All right. Sufficiently
9 severe, but in view of the fact of all the hopeful
10 notes and all the normal notes that have been in her
11 file, her death was sudden enough?

12 A. I beg to disagree because
13 in Intensive Care we had discussed the question of
14 whether this was adequate or not.

15 Q. But as she moved onto the
16 ward and then bearing in mind the suddenness of her
17 death, just the suddenness alone, did you not think
18 maybe the Coroner might have an autopsy and he might
19 be able to have a more definitive cause of death?

20 A. We didn't consider it at
21 that time.

22 Q. Finally, sir, with respect
23 to Dawson, the child Dawson was eleven months old
24 and I think, as this Exhibit 69 would reveal, she was
25 in many hospitals and many admissions.

A. That is correct.



HH4

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Q. It seems to me, sir, that the essential reason that she was admitted was failure to thrive. Would you agree with that? She didn't thrive?

A. Yes.

Q. One of the things that concerns me is the fact that we have heard, amongst other things, that digoxin, symptoms that it gives in life, although it may not reveal itself anatomically in death but in life, vomiting and lethargy are two hallmarks of digoxin toxicity?

A. Well, as I indicated previously, that is not specific for digoxin. I think, for example, hypoxia and pneumonia, these things could cause vomiting as well.

Q. I am saying to you that excessive vomiting and continuous lethargy have been commented in the literature as two symptoms, if you like, of digoxin toxicity.

A. Am I not correct in indicating that the digoxin level was normal during her admission?

Q. I think, sir, her last reading was 1.9.

A. Yes.

Q. I don't know how that relates



HH5

1

2

to the question I asked you: You will agree that
lethargy and vomiting --

3

4

5

6

A. Having regard for the
level, there was no reason to suspect that this was
due to digoxin since this is not specific for digoxin.

7

8

Q. I have no criticism of that,
sir. Bear with me because I am being suspicious
here; I am looking back --

9

10

11

12

13

14

15

16

17

A. I realize that.

Q. Yes. You are assuming
here that the 1.9 reading is the true indicator of
the state of affairs. I am saying to you here, looking
at this from another perspective, sir; that is, it
appears to me on page 80 and page 85 of the notes here,
that one of the things that really -- the last
24 hours of Amber Dawson's life were marked by the
fact that there was continuous lethargy and continuous
vomiting.

18

19

A. As I indicated, we felt
that was due to chest infection.

20

21

22

23

24

25

Q. Then, sir, you must have
got a surprise when you got the post mortem because
the post mortem from Dr. Cutz seems to indicate that
in fact there was no -- as I read it and interpret
it, there was in fact no infection and all the
anatomical problems that she had had had been rectified



HH6

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

by satisfactory surgery.

A. She did have the perforation of the stomach which I indicated I felt was adequate to explain the terminal electrical event.

Q. Sir, your last comment was that the lethargy and the vomiting might be explained by infection in the lung. I am saying to you that the post mortem doesn't reveal an infection in the lung --

A. There was no other condition there that, you realize she didn't have -- her pulmonary function was not inadequately, the level -- her carbon dioxide retention in the body, for example, it was above normal and, therefore, even if she didn't have pneumonia, she did have pulmonary insufficiency.

Q. She had had that for eleven months, hadn't she?

A. This would account for her lethargy and so on, and the terminal event, and we don't know exactly when this happened, I felt it would be perforation of the stomach.

Q. All right.

You will agree mind you, that Dr. Cutz seems to indicate all the repairs as being



HH7

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

satisfactory - and that is indicated on page 64,
under his "Final Impressions"; that, in terms of
cause of death, which is paragraph 8 on page 63, sir,
he doesn't find any anatomical cause of death.

By that I take it he doesn't
seem to feel the perforation even of the stomach
lining was the cause of death.

A. I am sure he can't relate
that to any rhythm disturbance that might have
occurred at that time. There was no way of knowing
that pathologically.

Q. You say you didn't review
her medication because you were not suspicious there
you had a cause of death in your mind, and there
was no rhythm disturbance that caused you to be
suspicious, you said?

A. I am thinking specifically
of digoxin as a possible cause, and we didn't --

Q. Somebody must have been
concerned mustn't they, because somebody notified
the Coroner?

A. I explained that by saying
that we wondered if the pulmonary problem was sufficient
to account for the --

Q. If you felt that was



HH8

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

sufficient -- you certainly felt it was sufficient;
you didn't ask the Coroner to be notified, did you?

A. We discussed it with the
resident who did.

Q. So, who notified the
Coroner?

A. Dr. Schaffer, initially.

Q. Is he senior to you, sir?

A. And Dr. Olley.



1H/DM/ak

1

2

Q. I am sorry.

3

A. And Dr. Olley.

4

Q. Are they your senior to you?

5

A. Dr. Olley is.

6

Q. Dr. Olley is?

7

A. Yes.

8

Q. Then Dr. Schaffer?

9

A. No, he was a resident.

10

Q. He was a resident?

11

A. Yes.

12

Q. So in spite of the fact that

13

you say at the time that there was an explanation
there for Amber Dawson's death, Dr. Schaffer of his
own accord notifies the coroner?

14

A. I believe I said we discussed
this probably.

15

Q. You discussed it?

16

A. Yes.

17

Q. You are suggesting that insofar

18

as discussed it you then told Dr. Schaffer to go
notify the coroner?

19

A. I might have done that, yes.

20

Q. You might have done it. I mean
do you recollect that or not?

21

A. I don't specifically.

22

23

24

25



1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Q. And I suggest to you, sir,
that if you had told the doctor to go and notify
the coroner that would be something which you would
remember.

A. I don't think that is
necessarily true, three years ago I mean.

Q. Well in light of the evidence
you have given here and the fact that you thought
you had a cause of death, I submit to you, sir,
that it wasn't you that told Schaffer to notify the
coroner at all?

A. As I said the cause of death
became clear when the autopsy report was available.

MR. SHANAHAN: Thank you.

THE COMMISSIONER: Yes, all right.
We will recess until 10 o'clock tomorrow morning.

MR. ROLAND: Mr. Commissioner?

THE COMMISSIONER: Yes.

MR. ROLAND: Just at the deadline
the Hospital would like to file its submissions with
respect to the questions.

THE COMMISSIONER: Yes, all right.
Thank you. Did you want something, Mr. Tobias?

MR. TOBIAS: Mr. Commissioner, I take
it Dr. Izukawa is coming back tomorrow morning



1

2

for further questioning by Miss Cronk?

3

THE COMMISSIONER: Yes.

4

5

MR. TOBIAS: Because I have one
question but it can easily wait until the morning
in view of the hour.

6

7

THE COMMISSIONER: Yes, if you are
going to be here.

8

9

MR. TOBIAS: I will be here in the
morning, sir.

10

11

12

13

14

MS. CRONK: Excuse me, sir, I
wonder given the hour if we could take a poll as
to the length of time counsel will be and there's
a possibility that Dr. Izukawa may not have to
come back.

15

16

17

THE COMMISSIONER: The only person
we really have to know from is Mr. Olah is one, but
Mr. Shinehoft has not gone yet and he has departed,
so that won't help us much, will it?

18

19

MS. CRONK: I didn't notice that.

20

THE COMMISSIONER: Mr. Olah, how
long will you be?

21

MR. OLAH: Very short, sir.

22

THE COMMISSIONER: And Mr. Roland?

23

MR. ROLAND: If we finish
Dr. Izukawa tonight I won't ask him any questions.

24

25



HH4

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

MS. CRONK: We are here tomorrow
and Mr. Shinehoft is not here and we don't know if
he is going to have any cross-examination or not.

MR. SHANAHAN: Sometimes,
Mr. Commissioner, Mr. Shinehoft let's me know, I
don't have any instruction as to whether he has any
questions or not.

THE COMMISSIONER: It is going to
be touch and go, because the bus from Hamilton is
always a little late and we may well come to him
before he is here, so we will just have to see what
happens. All right. Well, anyway it won't be long
and we will have to tell Mr. Lamek and Dr. Bain
to be standing by.

MS. CRONK: Thank you, sir.

THE COMMISSIONER: For some time
I would think before 11:30.

MS. CRONK: Yes, sir.

THE COMMISSIONER: Yes, all right.

---Whereupon the hearing adjourned at 5:00 p.m. until
Wednesday, November 2nd, 1983 at 10:00 a.m.

